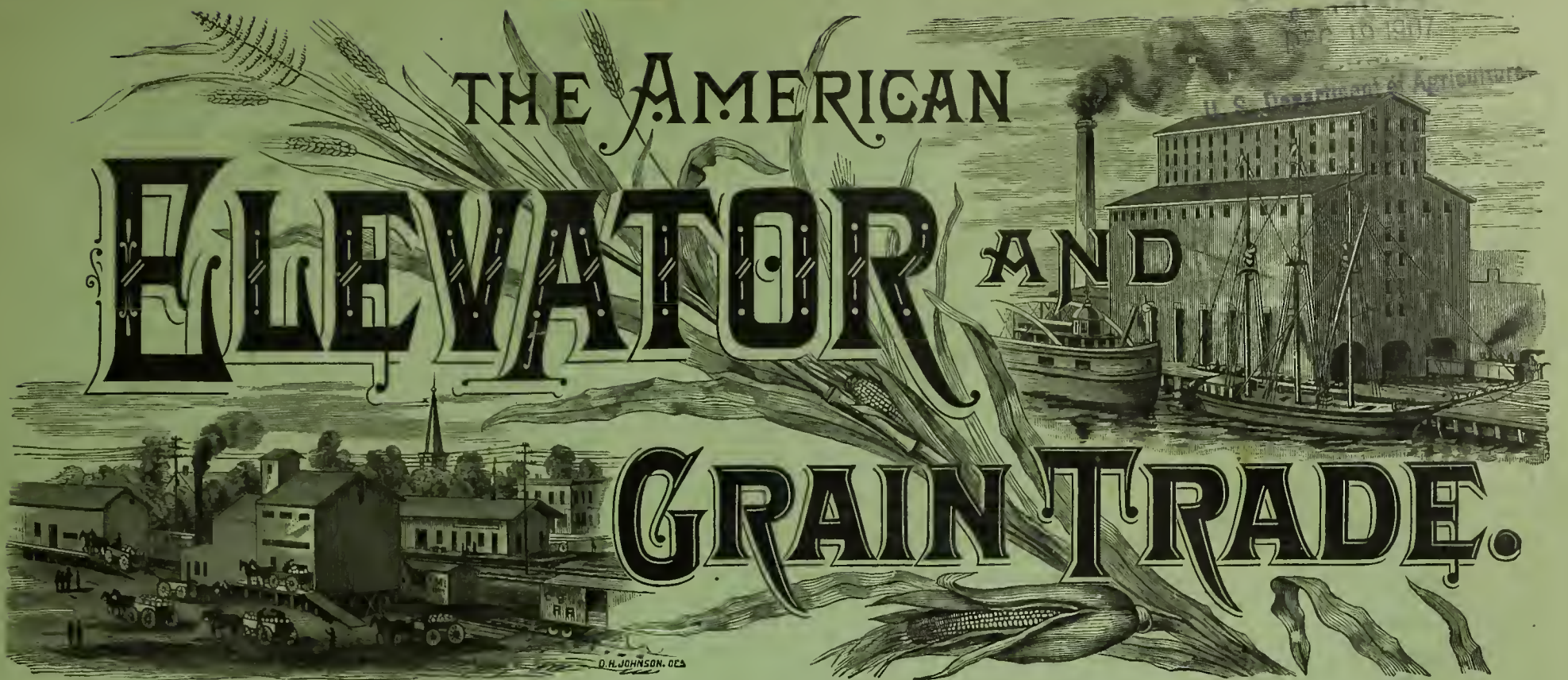


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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
MITCHELL BROS. COMPANY
(INCORPORATED).

VOL. XXVI. CHICAGO, ILLINOIS, DECEMBER 15, 1907.

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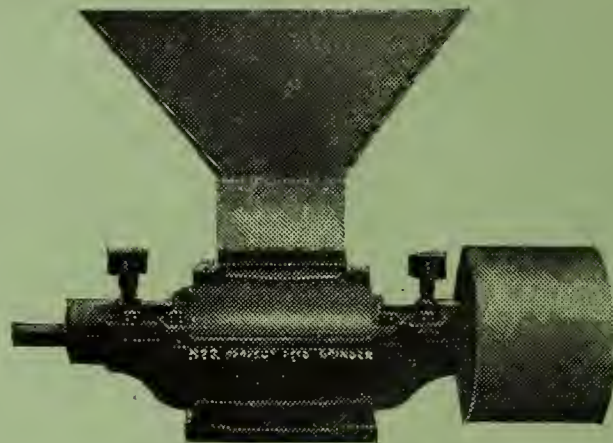
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Manufactured exclusively by

THE KNICKERBOCKER CO.
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The Perfect Feed Grinder

This Mill has Double the Grinding Capacity, while the Price is about One-Half that of any Mill Made.



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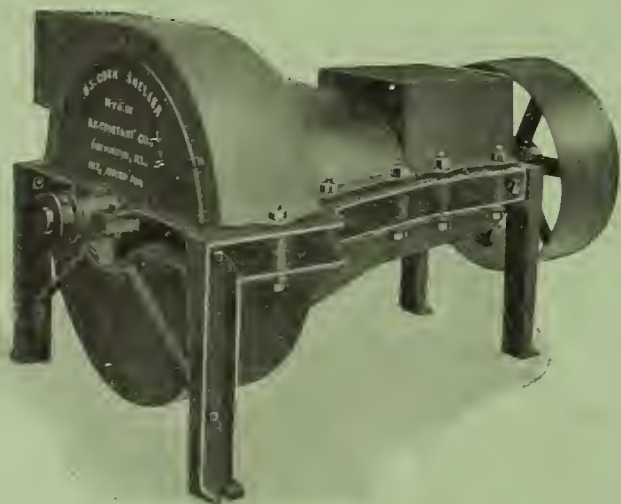
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About 1,500 Revolutions per Minute.

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(NOT KILN DRIED)

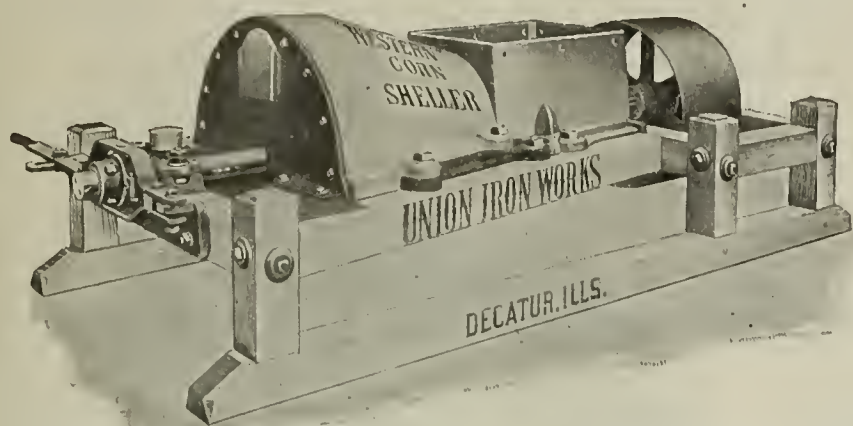
The Ellis Drier insures even and perfect drying at low temperatures. The only machine where the air passes through the grain uniformly and reaches every kernel. Built in all sizes from five bushels' capacity and up.

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ELLIS DRIER CO.

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"Western" Warehouse Sheller, Style A. Five Sizes Capacities 600 to 2,500 Bu. Per Hour.

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See these cuts of our
New Style A Ware-
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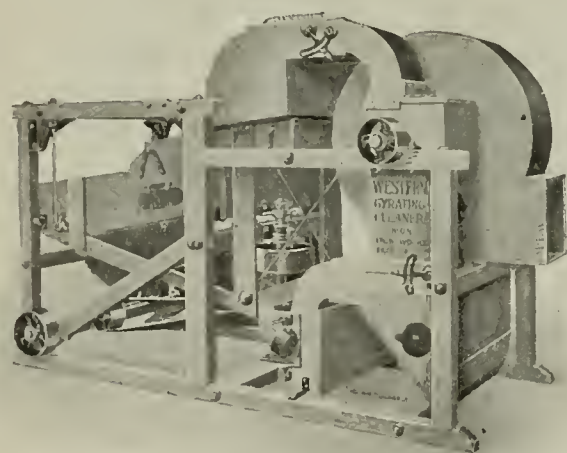
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MANUFACTURED SOLELY BY

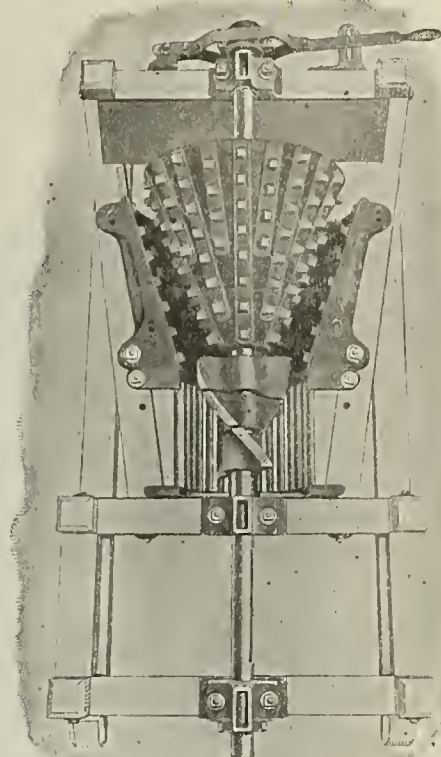
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Western Gyration Cleaner. Eight Sizes. Capacities 200 to 2,500 Bu. Per Hour.



Interior View of Style A Sheller Showing
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Power that is reliable and specially suited to mill and elevator men's needs. The engines famous for easy starting, perfect operation and uniform high grade construction. **Howe Standard Scales**

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Feed Grinder and Shredder

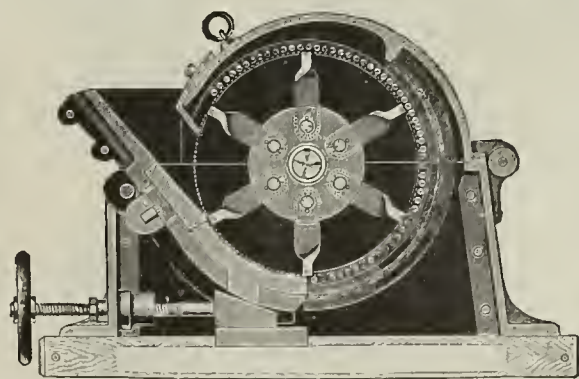
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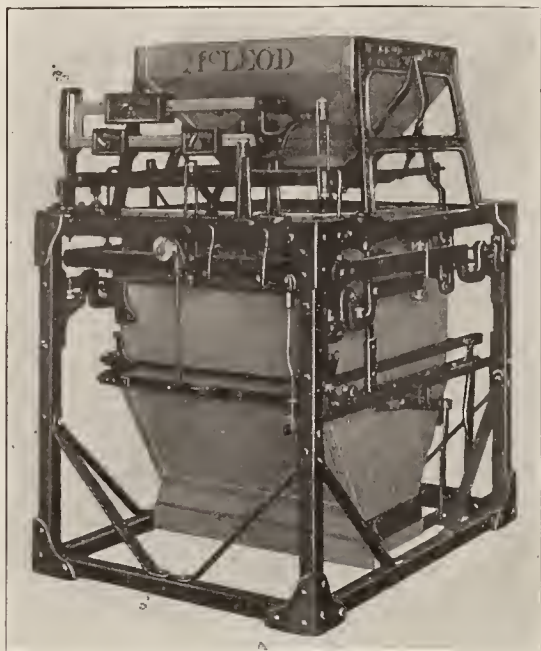
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The scale that weighs



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Do you want an automatic scale that can be set in one second to weigh by hand, thus testing at any stage of your work whether your grain is running uniform or varying in grade? If so, you want a McLEOD.

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NOTE—The McLeod Automatic Scale was formerly made under lease of our patents, by a company at Peru, Ill., but this lease terminated July 17, 1907, and anyone buying a McLeod Scale from any firm except ours will be liable to us for a royalty.

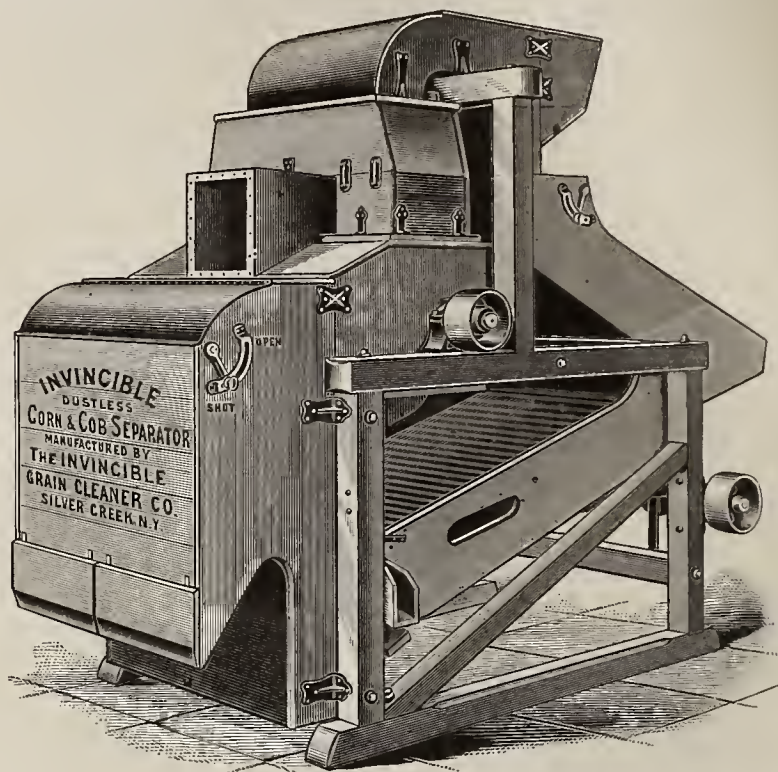
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This Separator takes out cobs, silks and all foreign matter and gives a high grade of corn.

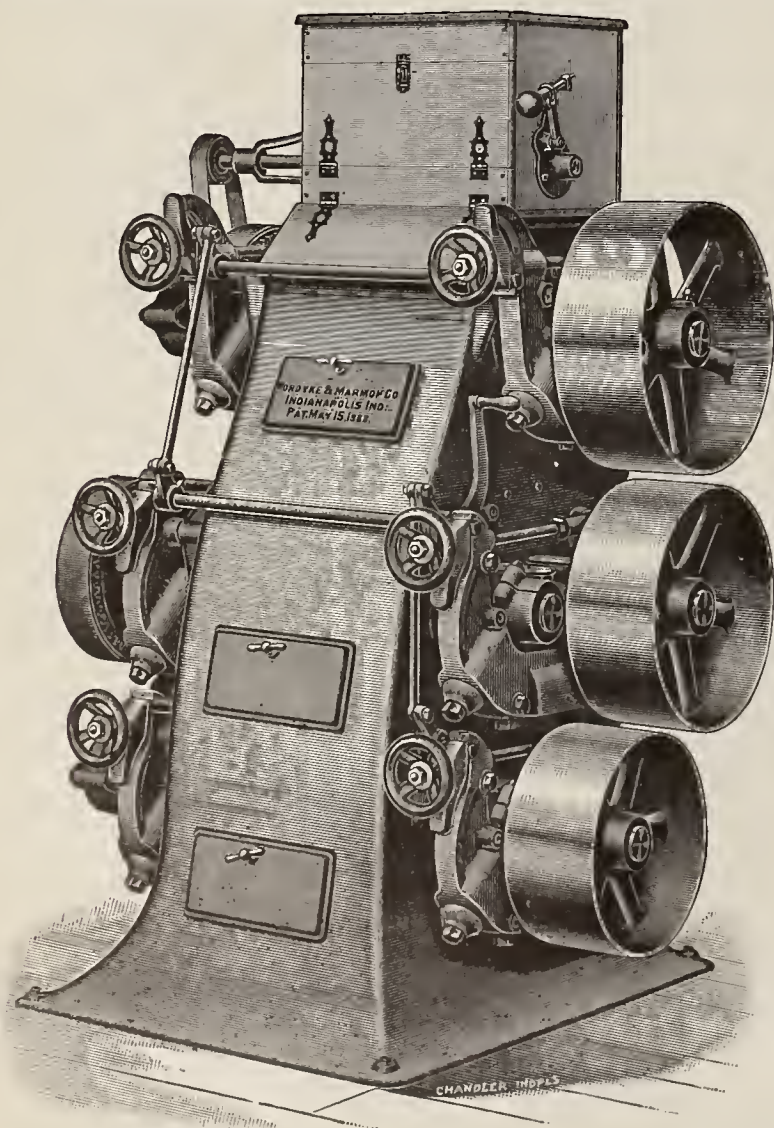
It is the most popular corn and cob separator on the market, the result of its extremely nice work. Order now.



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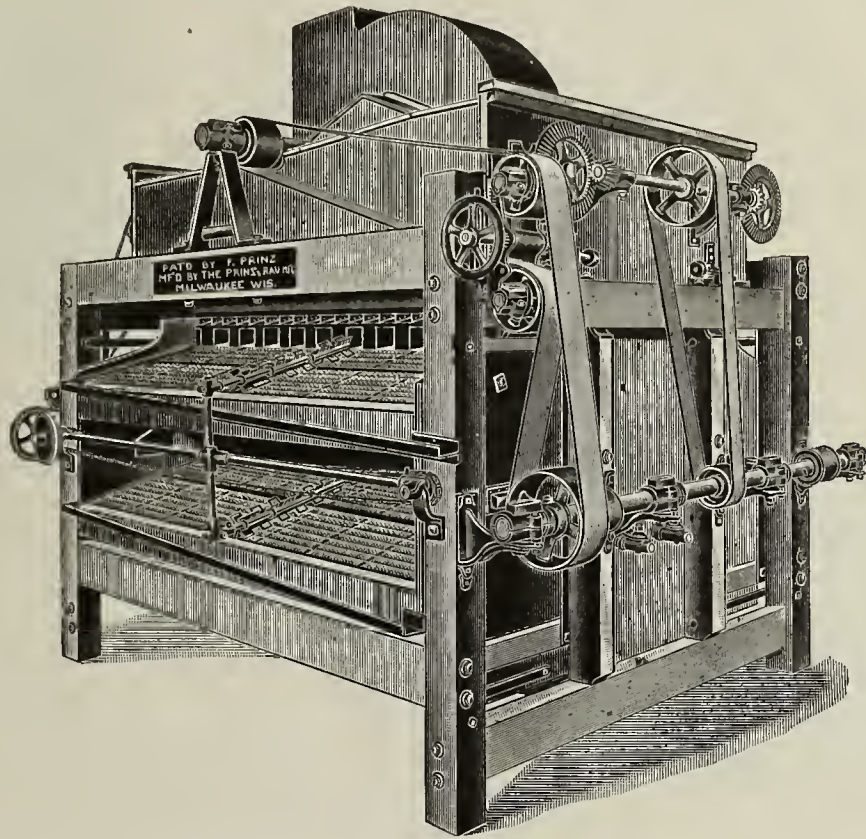
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America's Leading Flour Mill Builders

Established 1851

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GIVES UNIVERSAL SATISFACTION.

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17. W. H. B.

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(Signed)

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By W. H. Bovey.

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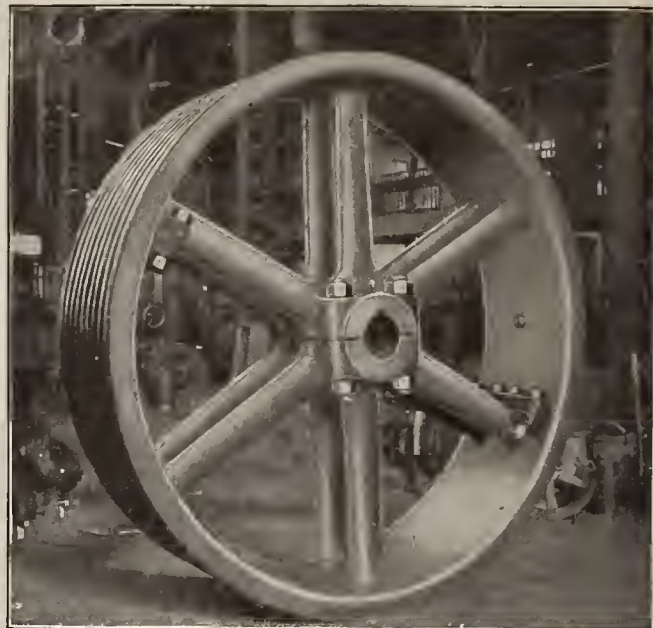
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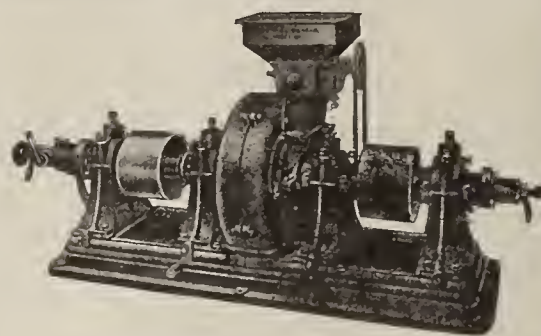
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IN CHICAGO AND COOK COUNTY

with notes of their construction, terminal facilities, etc., for use of railroads, commission men, insurance companies and others. Compiled and published by the "American Elevator and Grain Trade." Price 25 cents.

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Monarch Attrition Mills

are demonstrating the fact that they are the best feed grinders in hundreds of plants in all parts of the country. Monarchs are working under all conditions and the number of styles and sizes we build enables us to meet all requirements. We have many testimonials like this one:

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Don't take our word for it, though. Send for a mill on trial and give it the hardest test you know of. As a starter send for

OUR CATALOGUE

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Corn Shellers and Cleaners

We make a complete line of Corn Shellers and Cleaners.

The **Victor Sheller** has been for years recognized as the standard Sheller of the country.

It is now made adjustable and can be adjusted for different kinds of work. This feature, together with its well known qualities of strength, durability and efficiency, makes it a very profitable machine to operate.

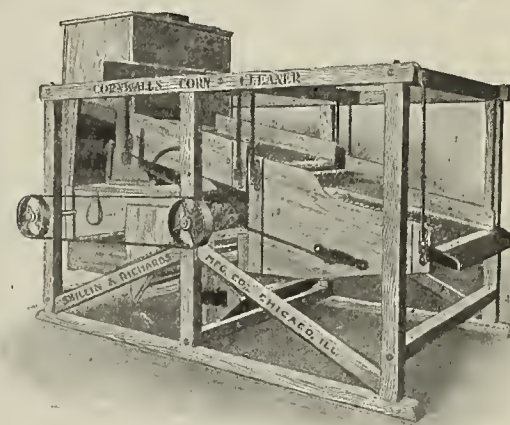
The **Cornwall Corn Cleaner** was the first of the shaker cleaners and has always kept the lead over this class of cleaners. Its patent finger sieve enables it to clean the corn better and do the work faster with less power than any other cleaner.

We also make the **Little Victor Sheller and Cleaner** and the **Rolling Screen Cleaner**.

Our line of Feed Mills and Separators is unsurpassed. Send for latest circulars.

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Builders of Elevator Machinery and Supplies
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Some Bargains in Large Elevator Machinery

- 2 Barnard & Leas Dustless Elevator Separators, capacity 2,500 bushels per hour each.
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- 1 800-bushel Improved Eureka Oat Clipper, with fan separate from clipping cylinder.
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- 2 No. 4 Barnard & Leas Oat Clippers and Warehouse Scourers, capacity 400 bushels per hour.
- 2 No. 6 Invincible Oat Clippers, capacity 800 bushels per hour.
- 1 No. 4 Victor Corn Sheller, 1,300 bushels per hour capacity.
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- 3 30-inch Webster Belt Conveyor Trippers.
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- Large lot of Power Connections, consisting of Gearing, Pulleys, both Wood and Iron, and Rope Sheaves.

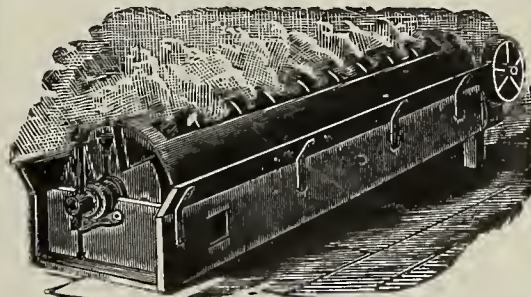
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Gump Machinery Co.

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THE
**CUTLER
STEAM
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SOLD BY ALL MILL FURNISHERS

Not an Experiment. In successful use 25 years drying
CORN MEAL AND HOMINY;
BREWERS' GRITS AND MEAL,
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Automatic in operation, requiring no attention. Double
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THE CUTLER CO., North Wilbraham, Mass.

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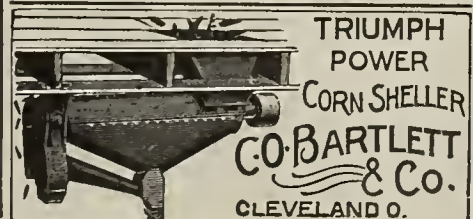


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GASOLINE
ENGINE**

For Pumping, Cream
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CORN SHELLE
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To equip your Grain Elevator
Building with our light self-
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Strong and substantially
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INEXPENSIVE, QUICK

No more work climbing
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THE U. S.

MOISTURE TESTER



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Including 1 gal. oil, strainer, thermometers, etc., and full directions for operating.

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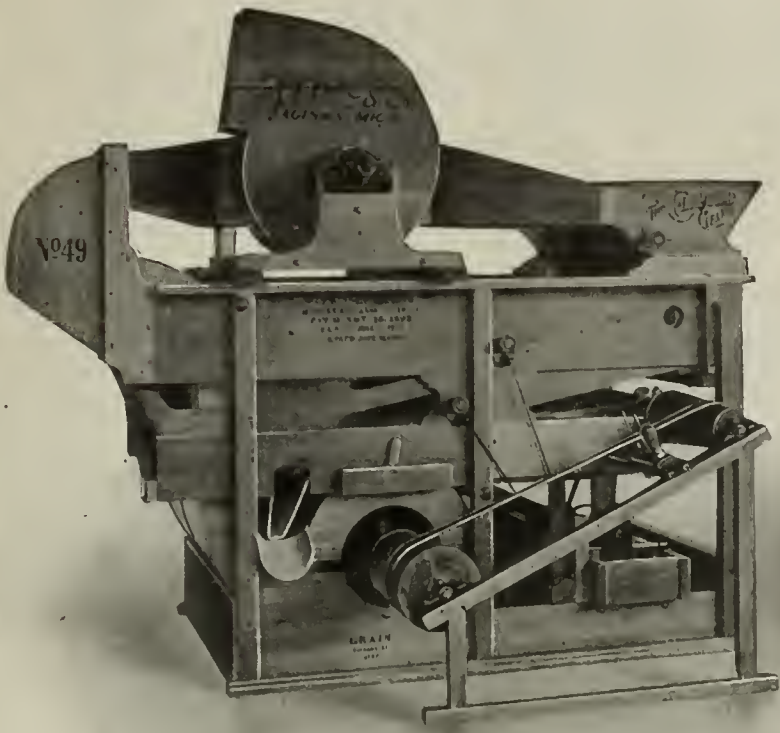
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Our Carload-a-day Drier and Cooler is in stock ready for immediate shipment. Price \$900.00 f.o. b. Chicago

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Our traveling Brush device is the simplest, strongest and best made. Strong fibre brushes are made to travel back and forth across the under side of the screens, thoroughly brushing them and freeing the perforations from any grain or seed with which they may become clogged, making it impossible for the meshes to fill up.

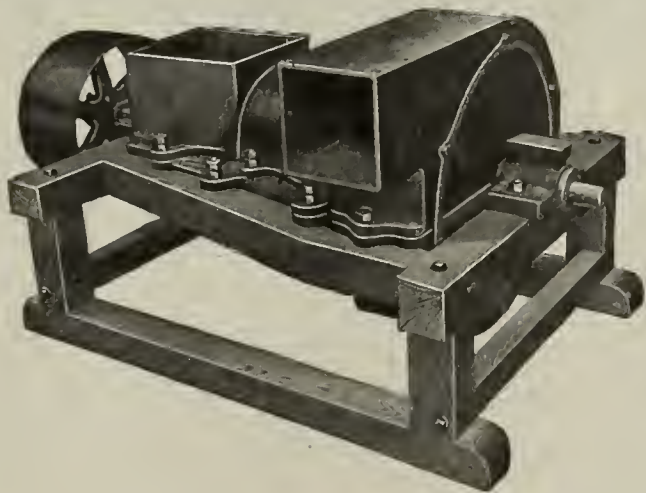
Any man who has used a Cleaner or Separator knows that the meshes or perforations in the lower screen soon become clogged so that it is necessary to "scrape" or "pound" the screen in order to clear the perforations. Our Traveling Brushes keep the screens clear all the time, and make the capacity and work of the machine uniform.

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The advantages of using one of our machines equipped with Traveling Brushes is apparent: The quality of the work is improved; the capacity of the machine is increased; the cost of operation is reduced, and one has the satisfaction of knowing that he has the best that money can buy.

Catalogue with prices and full description upon application.

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The New Ohio Corn Sheller

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Four ways of discharging your grain:
Right and left hand, over and under.

Screw-knocker feed.

Made in sizes capacity 300 to 1,000
bus. per hour. The best made Sheller
on the market.

Drags, Cleaners, Passenger Elevators,
Dumps, Heads, Cast Iron Boots; every-
thing for an elevator. Write

The Philip Smith Manufacturing Co.
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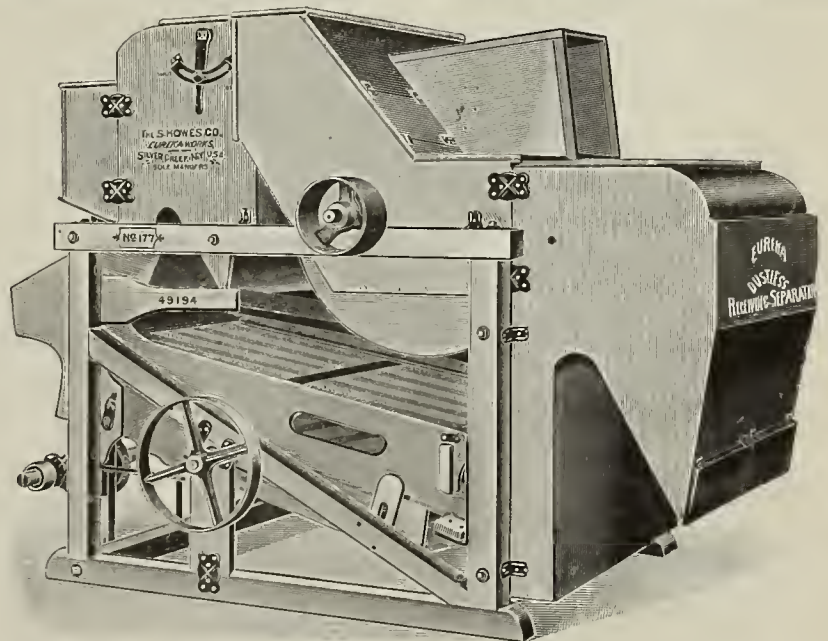


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represent the highest grade of machinery built
for cleaning grain, embodying all the best
methods and the latest improvements.

Self-Oiling Bearings used exclusively
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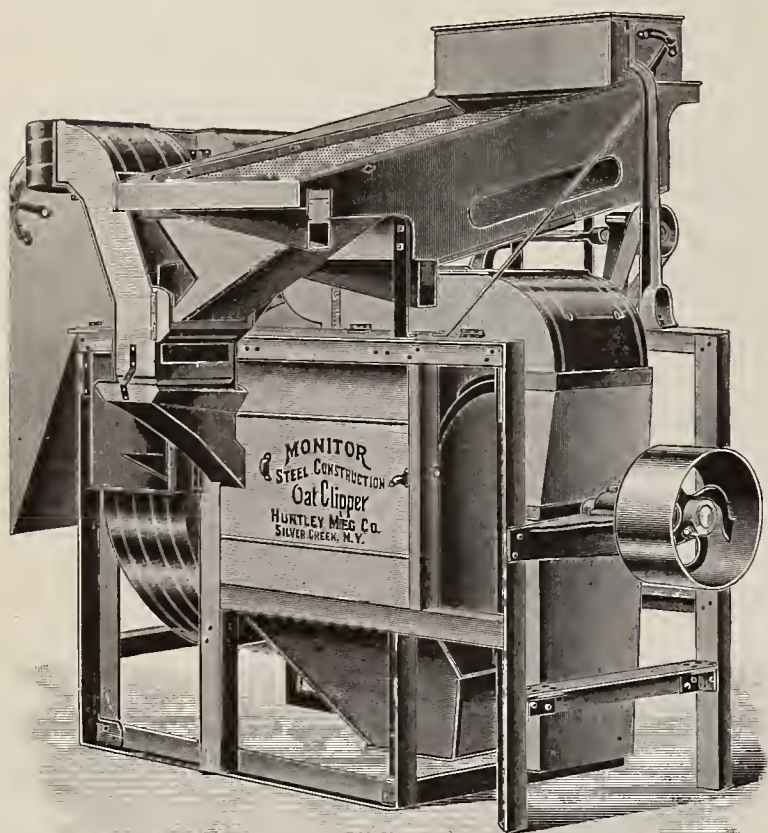
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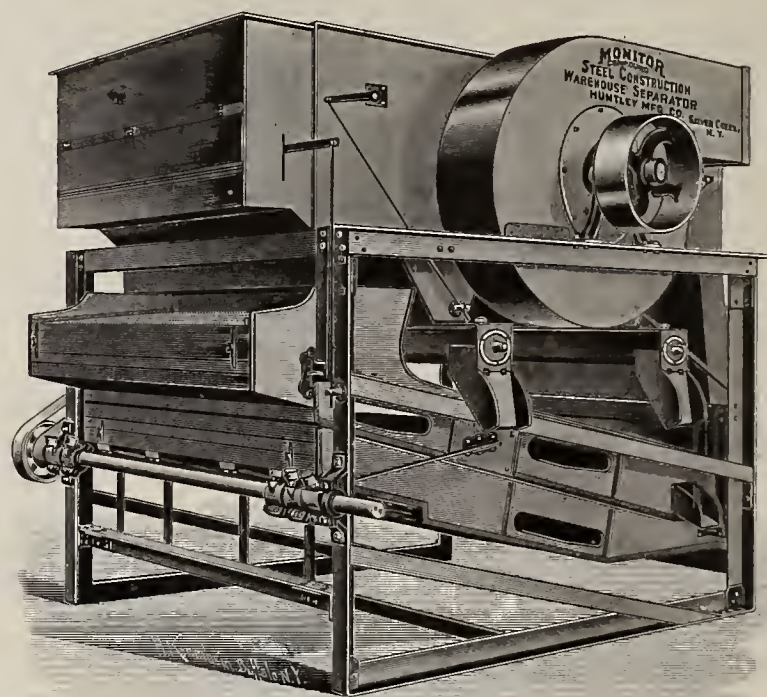
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A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

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THE NEW OGILVIE ELEVATOR AT FORT WILLIAM.

On the evening of May 26, 1906, the watchman at the elevator of the Ogilvie Flour Mills Company, Limited, at Fort William, Ont., heard an unusual commotion in the basement of the elevator structure. Superintendent Chalfant was hurriedly called from his residence in the neighborhood, and it was then discovered that the whole building, including foundations, contents and equipment, was separating itself from the train shed and moving slowly but steadily toward the river. The movement at first was very slow and deliberate. The

groaning, cracking and wrenching of the enormous masses of concrete and steel gave evidences of the frightful struggle which the anchorages of the building were maintaining to keep the structure upright. It was of no avail. Inside of twenty minutes the entire building, containing something like 300,000 bushels of wheat, had launched bodily forward a distance of about forty feet and settled on the bed of the river, the river face of the building being submerged to a point which, when the building was in its normal condition, was forty feet above the surface of the water. Such a catastrophe spread consternation among all interested, as the building had been in service for nearly two years;

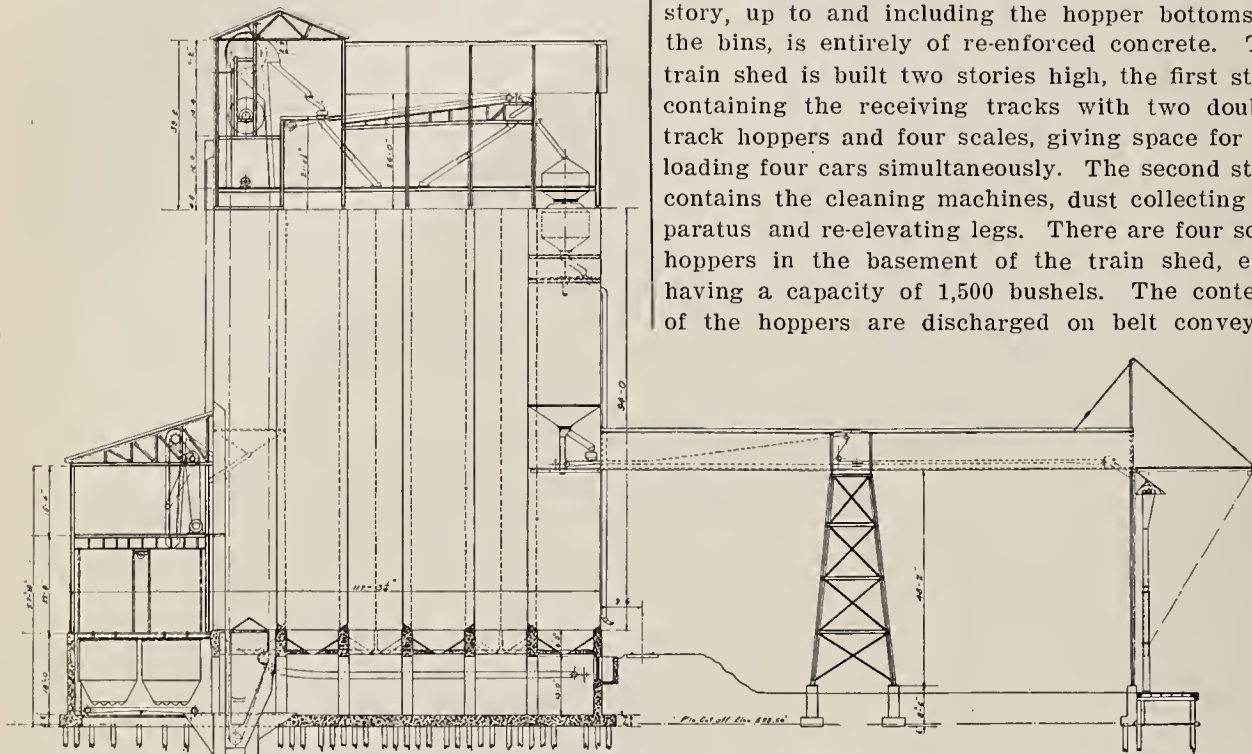
had been frequently and fully loaded; had been tested in every particular to its utmost capacity, and not the slightest evidence of weakness and no foreboding of the coming disaster had ever been detected.

Experts from all parts of the Dominion of Canada and the United States subsequently examined the wreck and nothing in the structural condition of the ruins or the soundness of the plan on which it was built could be challenged. The concrete of the substructure on which the great bin story rested could not have been made better by the hand of man. The re-enforcing was ample, the piling was abundant and disposed to receive



THE NEW STEEL GRAIN ELEVATOR OF THE OGILVIE FLOUR MILLS COMPANY, LIMITED, FORT WILLIAM, ONT.
Macdonald Engineering Co., Chicago, Engineers and Contractors.

the loads in the most advantageous manner, and, as an evidence of the great strength of the original structure, the bin story, with its enormous load of nearly 10,000 tons, launched into the bed of the river practically without injury. The plates of the bins, united together in one unit, were as perfect in their angular position in the bed of the river as they had been in their vertical position on the original foundation. The cupola and roof,



LONGITUDINAL SECTION, OGILVIE FLOUR MILLS CO.'S ELEVATOR, FORT WILLIAM, ONT.

of course, were wrecked, as was the train shed and all of the machinery, but the mystery was unsolved and remains unsolved to-day.

We published an illustration and description of this wreck in our issue of June, 1906, and we are pleased to present to-day an illustration and plans of the restored plant.

The Macdonald Engineering Co. of Chicago, who had built the previous elevator, were immediately engaged to wreck and rebuild the destroyed plant. An examination of the old foundation under the wreck showed that in all probability the filling around the piles had become loosened, either by the erosion of the river or by the washing of the network of springs and streams which continually flow into the river at this point under the elevator site. At any rate, the whole mass of the piles tipped forward toward the river, the points remaining on bed-rock, to which they had been driven, thus carrying the building forward a distance of about 40 feet and leaving a great yawning chasm in the bank of the river. It was found, of course, with this vast opening reaching to bed-rock, a distance of some 35 feet below the river, that it would be impossible under ordinary expense to erect a new foundation. Piling would be out of the question, as there was nothing to support it, and nothing but masonry carried to bed-rock would suffice. It was, therefore, decided to move the site of the building inland a distance of about 135 feet from the river, and in this new location the elevator was rebuilt and connected with the river by the means of shipping galleries, as shown by our illustration.

A unique feature of the new construction was devised by the engineers for reducing the total height of the cupola above the bin structure of the elevator. The ground level and track grade of the new location was approximately 18 feet above the basement floor of the previous site. The excavation for the new site, however, was made deep enough to bring the basement floor on the same level as the original building. This gave a head room of something like 18 feet under the track grade. The tracks which served the elevator were graded up an additional 3 feet, giving a total of about 21 feet of a basement under the tracks. In this deep basement the scale hoppers were located immediately under the tracks, so that all cars are unloaded directly into the scale hoppers and the

weights recorded on the scale beams, which are also located on the track floor. This arrangement obviates the necessity of carrying the cupola higher than is actually necessary for the elevator heads, spouting and distributing conveyors, and reduces the total height of the building something like 30 feet.

The new foundation is entirely of concrete, carried on piles driven to bed-rock. The basement story, up to and including the hopper bottoms of the bins, is entirely of re-enforced concrete. The train shed is built two stories high, the first story containing the receiving tracks with two double-track hoppers and four scales, giving space for unloading four cars simultaneously. The second story contains the cleaning machines, dust collecting apparatus and re-elevating legs. There are four scale hoppers in the basement of the train shed, each having a capacity of 1,500 bushels. The contents of the hoppers are discharged on belt conveyors

which carry the grain to the receiving elevator legs inside of the main building. There are three steel elevator legs passing from the basement up through the bin story to the top of the cupola in the main building, each having a capacity of 10,000 bushels per hour. These elevator legs discharge through a system of spouting and distributing conveyors to the bins. There are two shipping bins connected to the shipping galleries, each with a capacity of about 10,000 bushels. The galleries extend from the face of the bin story to the dock and each one

els, divided into 60 bins, varying in capacity from 2,000 to 15,000 bushels each. The power transmission machinery was furnished by the Skillin & Richards Manufacturing Co., Chicago.

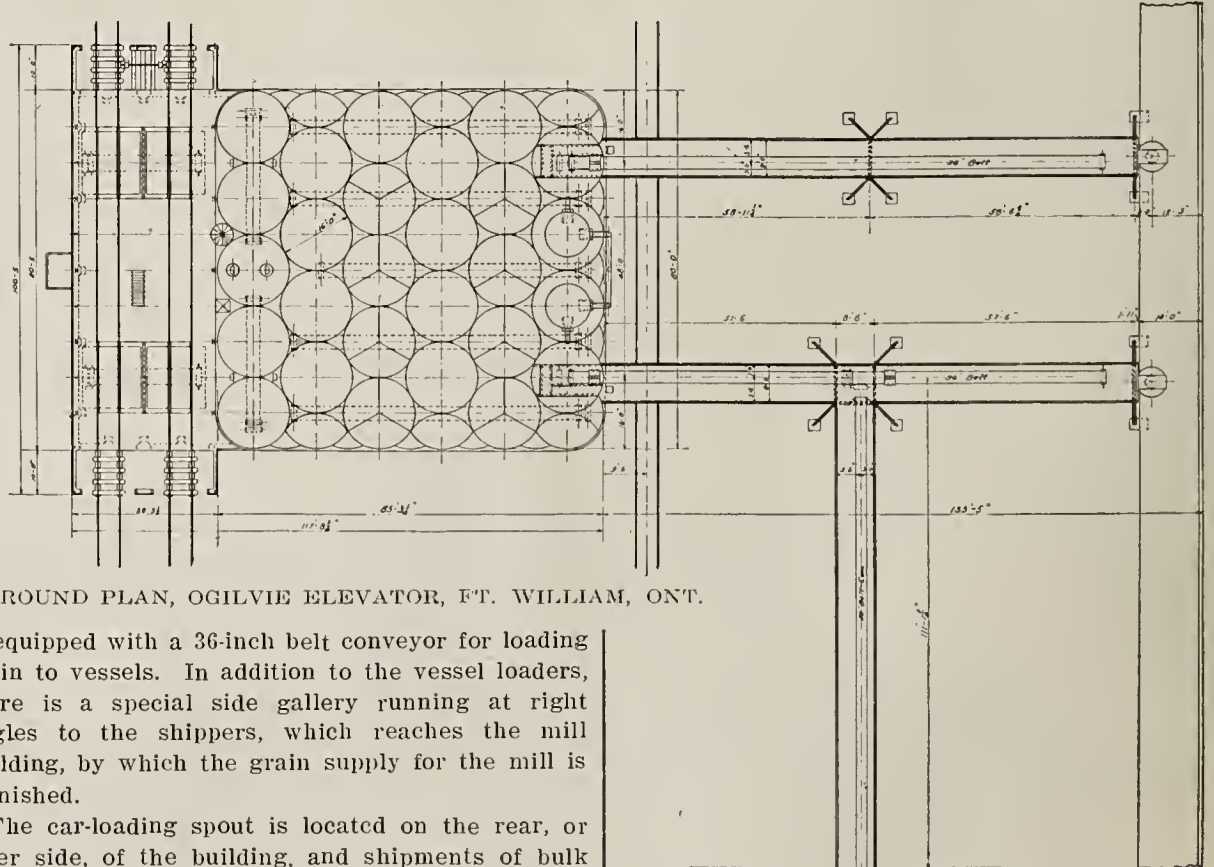
The work of reconstruction was commenced in June, 1906, and carried on continuously until its completion in October of this year.

The entire elevator and milling plant is now in successful and satisfactory operation and forms one of the finest and best equipped installations of its kind in the Dominion of Canada.

SECRETARY WILSON'S REPORT.

Secretary James Wilson's report of the work of the Agricultural Department in 1907 is characteristically rose-colored and mathematically detailed. The farmer, during the first half of the year, "was threatened with general crop failure throughout the country east of the Rocky mountains. The very last day was exhausted that could be withheld from crop growth and still leave a harvest worth taking. Every necessary day for the development of the corn crop was worth 20,000,000 bushels of corn. Cotton needed a longer time and offered to pay 30,000,000 pounds of lint for the favor of each day of growth during the full term. Wheat offered 6,000,000 bushels a day, tobacco 7,000,000 pounds, potatoes 3,000,000 bushels and 6,000,000 pounds of sugar. The entire wealth production of the farms was at stake and was dependent on a crop-growing season of sufficient length, and every one of its days was worth \$50,000,000 to the farmer and to the nation. At the end of the harvest the farmer has provided the country with commodities that are equal to the average of recent years in quantity and vastly more than are needed for national consumption. His labor and his knowledge have been rewarded with products, the sum of whose value is \$7,412,000,000."

The department's peculiar pet, the durum crop, stands at the head of the list for honorable mention—3,000,000 acres and a crop worth \$30,000,000 where once was "the home of the prairie dog and the cactus"—perhaps, but also some land that ought



GROUND PLAN, OGILVIE ELEVATOR, FT. WILLIAM, ONT.

is equipped with a 36-inch belt conveyor for loading grain to vessels. In addition to the vessel loaders, there is a special side gallery running at right angles to the shippers, which reaches the mill building, by which the grain supply for the mill is furnished.

The car-loading spout is located on the rear, or river side, of the building, and shipments of bulk grain to cars are made through two hopper scales, each equipped with garners, having a capacity of 500 bushels each and located in the top of the bins at the head of the car spout. All grain for shipment, either directly to the cars, vessels or mill building, is drawn from the storage bins by belt conveyors in the basement and elevated to the top of the building, and reaches its destination through the spouting and conveyor system.

The building has a total storage of 500,000 bush-

to be growing fife or bluestem; but that's another story.

The Secretary does not add any more bushels to the corn crop in his report—he regretfully concedes it is not as large as in 1906, but it is worth 26 per cent more, so it's an "even-stephe," as it were. Oats ditto. Barley was written about before the "episode" closed, and is spoken of as 85 per cent higher than a year ago. And so on.

[For the "American Elevator and Grain Trade."]
**RIGHT OF ACTION FOR GRAIN
 LOST BEFORE TRANSFER OF
 BILL OF LADING.**

BY J. L. ROSENBERGER,

Member of the Bar of Chicago and Cook County.

The transferee of a bill of lading, the Court of Appeals of Georgia holds (*Askew & Company vs. Southern Railway Company*, 58 *Southeastern Reporter*, 242), may maintain an action on contract against the carrier for failure to deliver to him all or any portion of the goods specified in the bill of lading; and this is true, whether the loss of the goods or the shortage occurred before or after he acquired title to the bill of lading.

A railroad company which in its bill of lading has agreed to deliver goods to a connecting carrier and which does deliver a portion of the goods to the connecting carrier, the remainder of the goods being lost, may be sued for the shortage, as a breach of the contract of carriage, in the county in which it undertook to deliver to the connecting carrier.

It appeared from the petition in this case that *Askew & Co.*, the plaintiffs, ordered from *Horne & Goans* of Chattanooga, Tenn., a carload of corn. *Horne & Goans* shipped the corn via Southern Railway, from Chattanooga, Tenn., consigned to themselves at Newnan, Ga., "order notify *Askew & Co.*" and drew and sent through a bank a draft on *Askew & Co.*, with bill of lading attached. After the arrival of the corn at Newnan, the plaintiffs paid the draft and received the duly indorsed bill of lading and the car of corn was delivered to them; but it was found that 22,306 pounds of the corn had been lost in transit. The contract rate of freight was 14 cents per hundredweight, and the railway company demanded and collected 16 cents per hundredweight, an overcharge of 2 cents per hundredweight, both as to the corn delivered and as to that which was short. The delivery at Newnan was made through another carrier, the Atlanta & West Point Railroad Company. The plaintiffs sued for the value of the lost corn and the overcharge in freight. The petition was dismissed on oral motion, upon the ground that it set forth no cause of action.

The specific point urged why the petition set forth no cause of action was that the corn having become lost before the plaintiff became the owner thereof by securing the bill of lading, the right of action was in the consignor and not in the consignee. Viewed solely as a tort (wrongful act), this might, the court says, be correct. However, the failure to deliver the corn in accordance with the contract of carriage might be treated simply as a breach of the contract of carriage.

Since a cause of action arising in tort is not usually assignable, and since at common law, ordinarily, causes of action originating on a contract were not, many decisions in other states and text-book citations may be found to the effect that only the consignor may sue where the goods are lost by the carrier before the consignee's title or substantial interest in the subject-matter of the shipment arises. Under the Georgia code, however, the court thinks that upon the transfer to the plaintiffs of the bill of lading calling for the full quantity of corn, there was assigned to them the right of action for the defendant's loss, or conversion of a part of it. When *Askew & Co.* became the owners of the bill of lading, they became the owners of all the corn wherever it might be, whether in the car or out of the car; and if the defendant retained possession, custody or control over a portion of it, by failing to deliver it on demand, or if the defendant broke its contract of carriage, as embodied in the bill of lading, by failing to deliver the corn to them or to the connecting carrier for them, the right to sue was complete in them.

The plaintiffs' action was good, whether it be regarded as a suit by them as transferees of the cause of action on contract which would have

inured to the original shippers, or by them as the actual owners on an implied undertaking arising from the defendant's conversion by not delivering the corn to them on demand after they acquired the title through the bill of lading.

RALPH S. GREEN.

The West has ceased to be the land of mystery and adventure, as in the old days—the romantic days, as we may say, when restless youth, "like the great Orion, went sloping to the West," but it is still a loadstone that draws to itself strong young men following opportunity in business. Even the grain business, born of surplus on the one hand and heavy consumption on the other, now attracts and finds favor with capable young men who see that the dry lands and irrigated tracts alike in Colorado and a part of the old "American desert" that used to be in Kansas and Nebraska, thanks to agricultural skill, are "blossoming like the roses," and that the cities and mines of the



RALPH S. GREEN.

state are becoming heavy consumers of grain and hay.

So while the Colorado-Nebraska Grain and Hay Company of Denver, organized in April last, is a young institution, it has been doing a business that promises to grow into something even more satisfactory and in accord with the field in Denver, which is itself enlarging annually. The Denver market is perhaps at a disadvantage in not having official grading, but that fact strengthens, if anything, the position of receivers who maintain their reputation for fairness and honesty to shippers.

Ralph S. Green, who is the hay department of this young firm, was born at Ash Grove, Mo., in September, 1879, but grew to manhood in and around Vinita, I. T. He was educated at Drury College, Springfield, Mo., and Beloit College, Beloit, Wis. Having finished his education, as his father had been in the hay and grain business before him, the son also took to it naturally, and became track and floor salesman for such excellent houses as Daniel P. Byrne & Co., G. L. Graham & Co. and the Lucas-Ensley Co. of St. Louis, and when the latter firm went out of business in September last, Mr. Green bought a partnership in the Colorado-Nebraska Grain and Hay Company, taking charge of the hay department.

The firm has already secured the confidence of its consignors and is doing its full share to make Denver not the last place to which shippers will consign, but one that shall have the preference over some other terminal markets, by reason of the high character of its receivers and their methods of protecting shippers, even in the absence of official supervision of any sort.

**GRAIN DEALERS MEET IN
 PEORIA.**

A meeting of the Central Illinois Grain Dealers' Association was held at the Fey Hotel, Peoria, at 7:30 o'clock, on November 26. President E. Roberts of Peoria in calling the meeting to order said it had been a long time since they had come together and it had been through the suggestion of others that he had called the meeting. "I have felt," he said, "that the work of this organization has been of great benefit to dealers through acquaintanceships formed and through a better understanding of each other's interests."

"If we look back ten years we will see the great improvement that has been made in conditions in the grain trade. I have thought this meeting would be of interest on account of the changed conditions this year as regards corn and oats. Those who have been in the grain business the past year, especially in handling oats, know what success we have had. We are now on the verge of handling the new corn crop and that is why we have called the meeting."

At the close of the president's remarks R. C. Baldwin of Bloomington was elected secretary of the meeting and the following was outlined as a suggestion for topics of discussion:

First—Proper manner of purchasing and paying for grain under present conditions.

Second—The yield and condition of corn.

Third—Will farmers sell at present prices?

Fourth—Amount of oats in farmers' and dealers' hands.

Fifth—The financial situation.

George Montelius, Piper City:—We are fortunately situated and in pretty good condition financially. Our bank is one of a few that has not refused to pay out money for drafts on presentation. We have not taken a bushel of new corn when shelled, but we propose to buy from now on. The yield through our section will average 50 bushels to the acre. The husking returns that we get from farmers are not at all disappointing. This year we refused to store any grain and consequently farmers have held back their grain.

L. E. Slick, Bloomington:—We have had no trouble as regards the financial situation. I think all the grain men in our territory are paying out all the money necessary. As to the proper method of purchasing grain first we have a large crop of corn and it is not fit to handle. We have only bought one car so far. I think that dealers should be very careful in buying. If we could buy at present prices there would be a big movement of corn. I think the proper thing would be for dealers to refuse to handle it until it is in condition.

J. A. Simpson, Jr., Minonk:—We have not handled any corn yet and do not expect to do so until December. There are more oats in farmers' hands than last year.

F. W. Arnold, Peoria:—We are buying corn on a basis of new No. 4. I do not think there is much oats left in farmers' hands.

A. H. Barlow, Chicago:—We are having no trouble over the banking situation and have handled two or three cars of new corn. We have a good crop of corn of fair quality and will run about 50 bushels to the acre. We have considerable more than 40 per cent of oats in farmers' hands and considerable more than a year ago.

C. H. Wagner, Washington:—We are getting all the money we want. There is about 30 per cent of oats in farmers' hands.

Wm. Moschell, Morton:—Corn in our territory is pretty soft. We have handled three or four cars and it all went no grade. I do not think that corn in our territory will grade better than 4 this year. The yield is good. There is not so much oats stored in elevators as there was a year ago.

T. J. Maguire, Eureka:—We have a good crop of corn and I think it will average 50 bushels. It is not in shape to handle yet. I think there is about 50 per cent of oats in farmers' hands and about 30 per cent of last year's crop.

J. A. Ellis, Deer Creek:—We have shipped a couple of cars of No. 4 corn. We have had no trouble over money matters yet.

J. F. Quigg, Minier:—Corn in our vicinity will average about 50 bushels. It is of poor quality. There is not over 20 per cent of oats in store.

C. H. Feltman, Peoria:—I think the most important thing is to buy corn at a fair margin and not take it in any faster than we can ship. We are discouraging farmers from bringing it in. The crop will run about 45 bushels per acre. We have about 25 per cent of oats in the elevator, that we had last year.

J. M. Kearby, Stanton:—We have had practically no trouble over the financial situation.

R. C. Baldwin, Bloomington:—We have not handled any corn yet. It is very uneven. There is about 15 per cent of oats still in farmers' hands.

Owing to the light attendance the election of officers was postponed until the meeting of the second Tuesday in January. The meeting then adjourned.

The following grain merchants and dealers were in attendance: A. G. Tyng, D. A. Hall, F. W. Arnold, E. Roberts, C. C. Miles, G. M. Miles, S. Mossiman, C. H. Feltman, Peoria; L. B. Wilson, Wm. Hirschey, M. Vehon, Oscar White, B. F. Traxler, A. H. Barlow, Chicago; T. J. McGuire, Eureka; R. C. Baldwin, Bloomington; J. A. Simpson, Jr., Minonk; J. M. Kearby, Stanton; W. O. Castle, Gridley; G. Montelius, Piper City; Wm. Moschell, Morton; J. A. Ellis, Deer Creek; J. F. Quigg, Minier; E. G. Haywood, Cookville; L. E. Slick, Bloomington; C. H. Wagner, Washington.

COLORADO GRAIN DEALERS.

The Colorado Grain Dealers' Association were guests at a promotion banquet at Denver on November 21, given by President John L. Barr of the Ayer Mercantile Company. The function was intended to inaugurate a campaign to boost Denver and Colorado as a grain center. During the past year over \$9,000,000 worth of flour had been manufactured in this state, and Colorado is fast assuming such importance as a manufacturer of all cereal products that this city and state should handle a greater amount of the grains grown in the West.

Secretary Thomas C. Scott of the Colorado Manufacturers' Association discussed the subject of present freight rates and facilities for the handling of grains; and at his suggestion a committee of three will be appointed to secure any possible concessions from the railroads that will further the movement.

J. K. Mullen, head of the Hungarian Mill and Elevator Company, expressed confidence in an early settlement of the present currency stringency, if every merchant would assume his share of the common burden with the public. For a time, he said, manufacturers should not push handlers of their products for payments of accounts and in turn they should ask dealers not to push their customers. By such co-operation, Mr. Mullen said, the situation would soon clear. In explaining the absence of cause for alarm over the present currency stringency, Mr. Mullen said that money in any form was nothing more than a kind of purchasing medium and that the gold coin and national bank notes of the present time were simply successors of the sheepskin money of ancient days. If the 40,000,000 estimated wage earners of the United States worked for a year at \$70 a month they would earn more money than there was in existence, Mr. Mullen pointed out.

Another meeting of similar purport will be held in the near future, which will be programmed to interest a wider circle of dealers.

[For the "American Elevator and Grain Trade."] AMERICAN COMMERCIAL EX- CHANGES—NO. 5—LOS AN- GELES, CAL.

BY L. C. BREED.

The career of the Chamber of Commerce of Los Angeles, though covering the brief space of nineteen years, contains some unique and interesting elements. Not only does this Chamber of Commerce differ in general plan and scope from most institutions of a similar name in other cities, but the conditions by which it is surrounded are so unlike those to be met elsewhere that it has been forced into new and unusual lines of effort, in order to work out its own peculiar destiny.

The Chamber of Commerce of Los Angeles is a

There was in existence in 1883 the Board of Trade, founded during that year, mainly for the purpose of protecting its members from unnecessary loss in cases of assignments and bankruptcy. The first of the several meetings that were held for the purpose of organizing the Los Angeles Chamber of Commerce took place in the assembly room of the Board of Trade, in an old building on the corner of Broadway and First Street. In 1888 a building corporation was formed within the Board of Trade for the purpose of constructing for it a permanent home, and as a result a two-story edifice was built. This property, seven or eight years later, passed out of the hands of the original building corporation.

The man who gave the first impetus to the practical work of organization was W. E. Hughes, and



CHAMBER OF COMMERCE BUILDING, LOS ANGELES, CALIF.

business institution that devotes its energies largely to the work of local development. The noteworthy characteristics that will distinguish it in some degree from similar organizations consist, in the first place, of those appertaining to its membership, both as to the number and variety. There are, in round numbers, a thousand names always on its rolls, which for a city of something less than 300,000 population is surprisingly large. A further feature of interest is found in the very general representation of all lines of business which the list of its members embraces. Another point of distinction is its substantial and permanent character.

Certain practical evidences of the Chamber's substantial character may be mentioned. Its regular income is something over a thousand dollars a month. Each member pays an initiation fee of five dollars and annual dues of twelve dollars. This income is supplemented by very considerable sums raised by subscription for special purposes.

he soon succeeded in securing the co-operation of Major E. W. Jones and S. B. Lewis. Their united efforts at a meeting held October 19, 1888, brought about the organization of the body, and at an election held soon afterwards, the following officers were elected: President, E. W. Jones; treasurer, John I. Redick; secretary, Thomas A. Lewis.

The present constitution of the Chamber was adopted in July, 1892. The government of the Chamber rests primarily with the members, who meet annually in the month of January for the selection of officers and directors, and again in February for the installation of the new board. Special meetings may be called at any time by the board of directors.

The years 1893-1895 constitute the most remarkable period in the Chamber's growth and advance, when it was put firmly on its feet and acquired new and enlarged quarters—those which it occupies at the present time—in the building shown in the accompanying engraving.

SOME OPINIONS ON PAST YEAR'S BUSINESS AND THE FUTURE OUTLOOK.

A representative of this paper recently interviewed a number of members of the Chicago Board of Trade on the subjects of the caption, with the following results:

"Have you had a 'good year' in 1907?" was asked Wm. J. Pope, of Pope & Eckhardt Co. "Excellent! Lots of hard work and good returns."

"To what do you attribute this success?" "First, Chicago is the best grain market in the world; the state Inspection Department is doing good service and improving in efficiency; the Weighing Department of the Board of Trade guarantees accuracy in weights to buyer and seller; low lake freights to Buffalo, at times 1½c per bushel, and the constant effort made here to have this market continue to be the great distributing center for domestic and foreign consumption. Secondly, the loyalty of a large list of customers—including most of the best men in the trade. Thirdly, our unceasing efforts to merit their business favors."

"From what sections has the business come?" "From all the Western and Northwestern states, from Ohio to Colorado and Wyoming, with Illinois, Iowa and Nebraska leading."

"Are not the principal cities of those states more disposed to market grain through Chicago?" "Yes! Such business has been a feature with us during the year."

"Do you look for an equally large business in 1908?" "That's a 'hard one' to answer! Much, of course, will depend on the crops of next year. Chicago will strive for her share and we expect to be 'in the swim'—as usual."

From a shipping standpoint to the East, business up to the time of the financial stringency was very satisfactory. We find that the work of the Grain Dealers' National Association is doing a lot of good by bringing the Western and Eastern trade closer together, and business is being handled with less friction than ever before. The East is getting bare of stocks and has to have grain; banks are making especial efforts to finance the exporting of grain and getting the pay for it back to this country in gold. As to the future outlook it depends entirely upon the financial situation.—GEO. A. WHITE, of White & Rumsey Grain Co.

The two things during the year that more largely affected the grain business were the green bug epidemic in the spring and the financial panic in the fall. It is still an open question whether the green bugs were the cause of the short oat crop, but whether or no, the fact remains that the oat crop was short. I look for a steady improvement in business after January 1. The good sense and coolness of the public in general has averted a panic and enabled the banks to keep control of things in a way that was not at first thought possible. This should be an indication of still better conditions in the future.—GARDNER B. VAN NESS.

Prices, the first of this year, went up on account of the green bug scare and made a very heavy speculative business in April, May and June. Business continued good until the financial scare, which broke the market sharply and restricted business seriously. The financial cloud now seems to be lifting, and this should have a tendency to warrant a better speculative trade. This, of course, means a better general business. At the present time there is a splendid cash demand for spot grain at first-class prices.—ARTHUR R. SAWERS.

Prices at the present time are higher than a year ago in all grains. The cause of this condition is the failure of the wheat crop all over the world, and of the oat crop and the unseasonable weather for growing and maturing the corn crop. Farmers are getting as much relatively, therefore, for their grain as in years of good crops. If the financial condition of the country is such that it will be difficult to finance the movement of grain, prices are plenty high enough. But with normal financial conditions prices should go higher, especially on

wheat and corn. The outlook for next year, therefore, depends wholly upon the financial situation.—PHILIP H. SCHIFFLIN, president Philip H. Schifflin & Co., Inc.

I think that the wheat tributary to Chicago is pretty well marketed. Corn is pretty much out of the country, there being very little old corn to be marketed, and conditions are such that it stays in the country regardless of price. The shortage of the oat crop has put the price very high, so that the ending of the old crop, particularly corn and oats, looks rather disastrous to the shipper and operator. The future doesn't look very rosy, as it is not possible, or it is too early, to make a statement as to winter wheat and the spring wheat crop is not largely contributory to this market. The corn crop situation is certainly demoralizing, as the picking of corn shows it is not as good as expected, and Iowa corn, especially, is reported as unsound and soft, not having matured properly. The situation is, therefore, demoralizing, both for the farmer and the shipper. Reports of oats still in the country indicate that the receipts will not be large. Taking the situation as a whole, it is rather pessimistic, although that is not the view of either crops, business or life that I generally take. It certainly warns all in our line of business to be



WM. T. REYNOLDS & CO.'S BUILDINGS AT POUGHKEEPSIE, N. Y.

conservative and careful, and not to be too liberal in either expenses or advances.—I. P. RUMSEY, president Rumsey & Company.

We have had a good year, somewhat marred by the telegraph strike, but not particularly restricted by the money market. I look for a renewal of confidence after the New Year and business back to its old channels. Grain men can be thankful that they are in a business where their product can be easily financed.—E. W. WAGNER.

RICE MEN'S ASSOCIATION.

A meeting of the Louisiana and Texas Rice Millers' and Distributors' Association was held at Beaumont on November 26 for the discussion of general conditions. The matter of statistics was found a fruitful theme, and after some discussion a letter was drafted to the Secretary of Agriculture, calling attention to an apparent error in the Government's preliminary estimate of the crop of 1907, which put the Louisiana acreage at 315,000 and that of Texas at 285,000, indicating a total yield of 4,800,000 bags, whereas the real condition of the crop at November 1 indicated only 4,200,000 bags.

A resolution was adopted instructing the secretary to get reports from all the mills showing the amounts of clean and rough rice on hand on the first day of each month, and after tabulating the same in comparison with same dates of other years to send the facts to each member of the Association.

Send us the grain news from your neighborhood.

WM. T. REYNOLDS & CO.

The firm of Wm. T. Reynolds & Co. of Poughkeepsie, N. Y., is one of the oldest and most substantial in the Hudson River Valley. Like many other business houses whose transactions now reach up into the millions, it began in a small way, and has been constantly growing. The earliest maintained line of boats of which there is any record was that of James Reynolds (the ancestor of the present members of this firm), which regularly ran between New York and Poughkeepsie in 1811. From this early period until sail power was superseded by steam this firm and its direct successors have maintained a constantly increasing volume of business. Navigation, in its turn, giving place to railroad transportation, the firm moved its business to its present location in 1873, where the elevator and warehouses were established on the main line of the New York Central and Hudson River R. R.

Their elevator has a capacity of 100,000 bushels of grain and is strictly modern in its inside appointments. Besides a large and increasing local grain trade, Wm. T. Reynolds & Co. have extended their grain jobbing and distributing operations over a broad territory and are well known in Massachu-

setts, Connecticut and New Jersey, as well as in New York, as the prominent grain brokers of this populous section. They are represented on the floor of the New York Produce Exchange and are members also of the Wholesale Grocers' Association.

The addition, in 1887, of the wholesale grocery department still further extended their multifarious interests and has added volume to the already large enterprise.

Traversing, in its long career, many periods of business depression and panic, the business of Wm. T. Reynolds & Co. has reached its present proportions by a strict attention to all details and by fair and honorable treatment of its patrons, principles which, handed down from father to son, readily explain a business existence of nearly a century.

M. F. Pantler, living nine miles from Bloomington, Ill., claims a yield of 2,019 bushels of corn on 18 acres of virgin land.

John A. Knott of Hannibal, Mo., is a candidate to succeed himself on the Missouri Railroad and Warehouse Commission.

The feature to-day was the drop of 4 cents in the price of poor new No Grade Corn. We predicted it in our letter of 5th inst. Further decline in such corn is probable, and shippers should make drafts accordingly. Neither Eastern shippers nor exporters can use it, and the local requirements are far below the offerings that are sure to be here soon.—Pope & Eckhardt Co., December 7.

THE NEW ELEVATOR AT SIOUX CITY.

Sioux City, Iowa, may now grow as a grain market. The completion of the elevator of the Interstate Grain Co., a subsidiary corporation of the J. Rosenbaum Grain Co. of Chicago, may be said to mark an epoch in the commercial history of the city. It is a well equipped terminal elevator, modern in every way, and has a storage capacity of 200,000 bushels, with handling capacity of forty cars of grain in and out daily.

The working house is 84x90 feet in size and 140 feet high. The basement and foundations are of

perience as grain men; and under their leadership Sioux City is now able to offer you all the advantages afforded by other terminal markets, with the additional advantage of being located practically at your door. The importance of the last mentioned feature will be appreciated by all grain shippers, as it means quick returns, less liability to loss from leaky cars, and it will enable them to personally keep in touch with shipments by telephone and be present in case of damage by accident or in case of dispute, or for any other reason that would make the presence of the shipper desirable.

"For the purpose of insuring to all parties efficient service in the weighing and inspection of grain,

[For the Michigan Hay Association.]

TRACK SELLING VS. SHIPPING DIRECT TO DISTANT MARKETS.

BY C. M. PIERCE.

We are aware that there are many sides to this question; that it is surrounded by many conditions and circumstances; and that what would apply to one shipper or location would not be profitable or expedient for someone else situated differently. But we are in hopes that we may, at least, be able to bring out some one point that may be of benefit.

In the first place, it makes all the difference in the world how careful you are in your selling, whether it be on track, at home, or in some distant market. If you sell to straight, honorable firms, who will take their medicine and smile when the market declines, it makes but little difference how you sell, whether f. o. b. your station or f. o. b. their station—if your firms are honest. For the average Michigan shipper, however, I am of the opinion that track selling is preferable. First, as a rule there will be less trouble with shortage and grade; second, you have your money to use sooner and can keep it in your business; while if you sell to a distant market you are out of the use of your money from three to five weeks. To a firm doing business to the full limit of its capital this means much; and as a rule I am of the opinion that the track seller makes more money with less risk than the firm who sells in a distant market.

The firm that sells on track has an advantage over the distant-market man in many ways, for the reason that he either gets his pay before the car leaves his track or else by a sight draft, which is practically the same thing; while the distant-market man sells with draft attached to bill of lading; and if there is a decline in the market, his hay is very apt to be rejected when it gets to destination, 500 or 1,000 miles away. Then he is at the mercy of the dealer who can make his own terms, or else he must turn the hay over to some commission house to be sold for his account—in either case, it is very unsatisfactory. Then the expense of looking up far-away markets for your hay is no small item of expense; and is a point that the track seller does not have to contend with.

Again, in deciding the question much depends on the amount of business you are doing. The man or firm that handles 1,000 cars of hay has to have more resources for moving his goods than the one who only handles 300 or 400 cars in a season. There are times when hay can't be sold on track unless liberal concessions are made, which would be unprofitable to the seller; and yet it becomes absolutely necessary for him to move the hay. The firm that has hay contracted at such a time in a distant market has the advantage, as it can sell hay and move it when the track seller is unable to do anything. But, as we said at the first of this paper, much depends on circumstances, and it is a problem that each dealer must decide for himself. Scarcity of cars, the amount of hay you have bought, the capital invested, etc., all must be taken into consideration.

Again, if you prefer selling in distant markets, you can't be too particular in shipping to reliable dealers. Not only ought they to have a good financial standing, but, what I consider of more importance, moral standing also; viz.: Do they have the reputation of doing as they agree? Too much stress cannot be laid on the value of the business of such firms, and when you once get their trade, stick to them "like a puppy to a root," even if you have to make concessions to them that you do not make to other firms. The same rule will prove good with the man who sells on track.

Much of the satisfaction and profit of selling hay in either of the above ways depends largely on the honesty and correct methods of both the buyer and seller who are doing business. If the



THE INTERSTATE GRAIN COMPANY'S ELEVATOR AT SIOUX CITY, IA.

concrete and the superstructure of wood, sided with iron, with a gravel roof. There are seven elevator legs, four grain cleaners, four hopper scales and a grain drier of a capacity of about 1,000 bushels per hour. About 300,000 bushels tank storage is soon to be added.

In connection with the opening of the elevator the Sioux City Commercial Club publishes the following:

"We beg leave to call your attention to the completion of a thoroughly equipped modern terminal grain elevator at Sioux City, to be operated by the Interstate Grain Co., also to the fact that the Cereal Grain Co. has remodeled its plant, and Sioux City now has two well equipped terminal houses ready for business.

"Both of said companies are backed by practically unlimited capital, and are under the management of men of exceptional ability and wide ex-

the bankers and business men of Sioux City have organized a Board of Trade to supervise and control such weighing and inspection. Said Board of Trade has been fortunate in securing the services of Charles Simon of the Chicago Board of Trade inspection department as chief inspector and weighmaster. Mr. Simon has been engaged in the inspection of grain in Chicago for many years, and stands very high in his business. We have adopted the best methods in vogue in Minneapolis and Chicago for the proper weighing and grading of grain and shall do everything in our power to accommodate the patrons of this market."

F. W. Eva, state grain inspector of Minnesota, has remodeled the state's system of dockage weighing. Under the new arrangement everyone interested in a car of grain may take it to the sampling room and see it is sifted and weighed.

seller is slack in his business methods and poor judge of hay, he will always have trouble, whether he is a track seller or sells in distant markets. In my opinion, if every hay baler in the country was required to have a license before he could bale hay and then compelled to guarantee his weights, much of the charge of dishonest dealing would be eliminated from the business, for both the track seller and for others.

Time waits for no man. In this age of hurry and rush changes are frequent and numerous. Plans and methods for doing business that are right to-day may be wrong to-morrow, with this exception—honesty and square dealing are always right, but in many instances sadly out of fashion. In no business should the golden rule be followed so closely as among hay dealers. Honesty in the smallest detail as well as in the largest will always win out.

There is one thing certain, that the man who can sell his goods on track and keep his hay moving at a fair margin is a sure winner, while the firm who sells in a distant market is not sure of his net profit or loss for months after the goods are shipped and delivered. Bills for shortage, bills for damaged hay—perhaps damaged while in transit—claims for overcharges in freights, etc., are matters that have to be looked up and adjusted months after the track seller has his money and profit in the bank and has gone on his annual vacation.

Our own case is an example. We had fully decided to attend the National meeting at Niagara Falls this year and thought we were going to have our business in fine shape to leave. But just at the last moment we had about fifty cars of hay loading and in transit to distant markets. The market began to decline about this time; and as a result we had several cars of hay rejected while in transit, which had to be resold and we did not have time to even think of the convention, to say nothing about being there. If our hay had been sold on home track, much of this trouble would have been eliminated.

So we say, sell your hay home track if possible. Sell in distant markets if you have plenty of time and money to look after it, and consign to commission houses if you have to. In all cases, if you must do a man, do him good; look pleasant and hope for the best.

Vassar, Mich.

ARGENTINE GRAIN ELEVATORS, LTD.

This company has just been registered with a capital of £250,000 in £1 shares, to adopt agreements (a) with A. J. Alexander and N. W. Jackson, providing for the acquisition by the company of a certain concession to be granted by the Argentine Government, and (b) with Spencer & Co., Ltd., Melksham, providing for the construction of silos for the company, and to carry on the business indicated by the title and that of warehouse and granary keepers, etc. The subscribers are: A. J. Alexander, Buenos Ayres, merchant; T. R. Murray, Keverstone, Bath, engineer; W. L. Phillip, Sherbrooke, Box, Wilts., engineer, and four others, clerks, all one share each. Minimum cash subscription one-third of the amount offered to the public. The number of directors is not to be less than three nor more than seven; the first are A. J. Alexander, T. R. Murray and W. L. Phillip; qualification, 250 shares; remuneration (except managing directors), £100 each per annum; registered office, 32 Queen Victoria Street, E. C.—Corn Trade News.

At the Farmers' Institute of McPherson County, Kan., on November 18, in the boys' corn contest, there were forty-six entries to compete for the prizes offered by the Commercial Club of McPherson. The Club offered to the fifteen successful competitors a trip to the farmers' institute to be held in Manhattan.

THE U. S. MOISTURE TESTER.

There has been for a long time a demand for a machine or device that would show the moisture content of corn in a short space of time, and this demand is now filled in the U. S. Moisture Tester, shown in the illustration, mention of which has been made frequently in these columns in connection with the moisture tests by J. D. Shanahan, grain standardization expert of the Agricultural Department. It is now manufactured and placed on the market by the Hess Warming & Ventilating Company of Chicago on the lines laid down by the inventors, Brown and Duvel of the Department of Agriculture. Twenty minutes is the time required for making the test; and the simplicity of the operation of testing and the nominal price of the apparatus place it within the reach of every grain buyer.

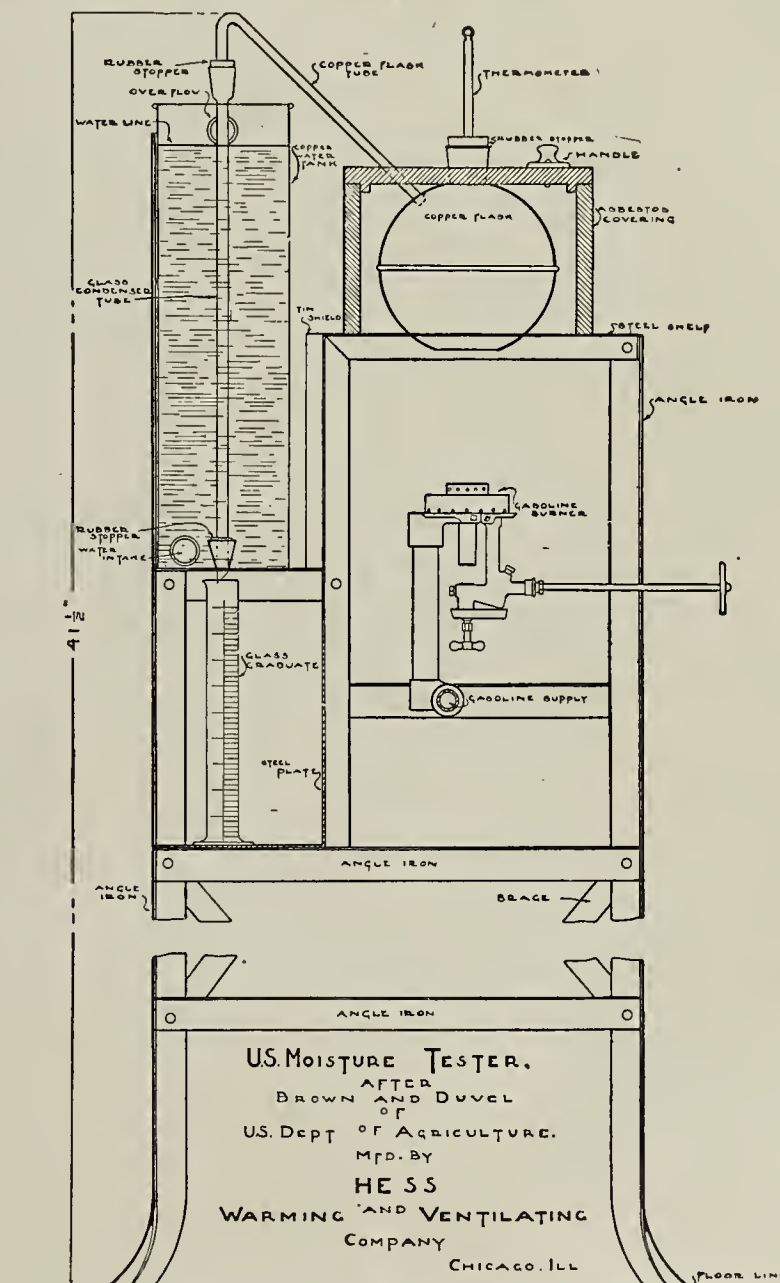
The cut shows a sectional view of the tester.

the installation of moisture testers in every large grain center. Their great value to the grain trade is unquestioned. Every grain dealer, elevator or mill operator should use this device, for by no other method can the exact moisture content of grain be so quickly and easily ascertained.

Every owner of a drier should use the tester, for only by its use can he determine the exact results of his drying operation. It can be safely predicted that the day is not two years distant when its use will be as general as that of the bulk measure and testing scale, and that the grading of grain for condition will be based on moisture percentages rather than on the present indefinite conditions known as "dry," "reasonably dry," "damp," etc.

LONG-LIVED CORN.

Seventeen years ago, said a Peoria telegram to



The glass flasks heretofore in use are superseded by flasks of spun copper, which are practically indestructible, thus obviating the frequent breakage of these parts. Gasoline or gas burners are supplied, at the option of the buyers, thus adapting its use to any situation.

The best of material and workmanship enter into its construction, the framework being of steel, thoroughly braced and of convenient height, permitting its use without an additional support or standard. The tank and tubes are of copper, no glass entering into its make-up except for the condensing tubes and graduated receivers.

The Hess Company has prepared a stock for immediate delivery, in advance of this announcement, and will fill orders promptly. It offers also the Torsion Laboratory Scale, recommended and used by the Department of Agriculture for testing of grain. A new booklet, describing the tester and scale, will be sent free on application.

The work of the Department of Agriculture, in the interest of uniform grading of grain, has led to

the Chicago Inter-Ocean, a lad living near the village of Ohio, Bureau County, Ill., lost his life by suffocation in a bin of corn. His body was disinterred in the fall of 1906 for reburial in a new cemetery. Nothing was left but a few bones, but in the casket were three perfect kernels of corn, which it is supposed were inhaled in the young man's lungs. Last spring these kernels were planted, and each one grew a healthy stalk, and each stalk supported two large ears of corn.

The U. S. consul at Calcutta says that the Natal government, which is doing its utmost to find a market in the mother country for the surplus maize or corn of that country, has obtained preferential rates of freight on a most liberal scale from the Union Castle Line of steamships. The mealies are all carefully graded and sorted at Durban by a government inspector, and samples have been forwarded to the agent-general in London.

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SOME THOUGHTS ABOUT GRAIN INSPECTION.*

BY JOHN D. SHANAHAN.

Looking backward in an endeavor to obtain a glimpse into the history of the grain business, particularly with reference to the inspection of grain, one cannot fail to conclude that in all probability the inspection in one form or another of cereal grains for the purpose of fixing their commercial value is a practice as old as commerce itself. This may also be truly said of other articles of commerce whose values vary to any great degree under changing circumstances and conditions.

In relation to grain inspection alone, it requires no very great stretch of imagination to conjure up the picture of a grain merchant of the earliest civilization standing before his tent, holding open with one hand the mouth of a sack of grain of which he is the prospective purchaser, while with the other hand he rummages deep in the wheat in order to satisfy himself that the grain is all that it appears to be from the top of the sack, or all that it has been represented to be by the seller; or perhaps he may be just a little suspicious that the seller has "plugged" the sack with inferior grain. Stovepipes and similar instruments used by our moderns for this purpose had probably not been invented at the time, but all history considered, it is not too much at least to take it for granted that the ancient grain merchant was as ingenious in his way at inventing deceptions of this character as his modern brother. After rummaging through the grain sack until satisfied that the grain is all of one quality, he brings forth a handful of the wheat which he carefully scrutinizes, tastes and smells, just as the modern grain inspector or merchant would do to-day, calculating its value the while. Perhaps he is figuring on the amount and quality of flour it will produce if milled; or if a number two grade, he perhaps knows of some brother merchant or a miller to whom he can sell it as number one, or perhaps, if it becomes necessary, he may put the rubber in his conscience to good use and certify it as number one. He may also be calculating the chances for its getting into the "contract grade" and figuring its value for future delivery, or perhaps he may have in mind a little matter like "cornering" the market, as traditional Hebrew history tells us that Joseph (he of the coat of many colors) did, something like 1,700 years before the Christian era began, and after he had been sold by his brethren as a slave into Egypt. In the light of his brothers' treatment of him and the history of the modern grain "corner," it is difficult to comprehend the balance of the story of the treatment they received at his hands when they found themselves "short" of the market. To paraphrase an old saying, "There is nothing new" in grain inspection, for the grain inspector of to-day employs the same methods of determining grades, and through grades the values, of the grains submitted for his judgment, as we may reasonably suppose were employed by the ancient grain merchant.

It was, no doubt, because of misunderstandings between the buyer and seller of grains, or perhaps, a general distrust of one another, among grain merchants, that brought about the organization and establishment of the modern grain inspection department. Tribunals of arbitration they were meant to be, although on broad ground they have failed signally in many instances to merit such a designation. At exactly what period in the history of the grain business these tribunals were first established is not clear, but it seems reasonable to suppose that the development was gradual from the individual arbitrator to the organized body of grain inspectors under more or less competent jurisdiction.

According to grain trade tradition, the idea of

grading and classifying grain in this country on the basis of its commercial value was first practiced by boatmen on the Chicago River, over which, in early days, much grain entered the Chicago market, but it is altogether likely that such grading was of a crude nature and did nothing more than to keep the different kinds of grain separate while in transit, for the reason that individual shipments were not large enough to make a full cargo for a trip. Authorities are agreed, however, that the idea and scheme of inspecting, grading and certifying to grades of grain, such grades arranged numerically and according to certain requirements of quality, condition, and color for each grade, and the practice of buying and selling grain on such certificates, originated at Chicago some forty-five to fifty years ago, as a result of that market's ever increasing volume of business and the necessity of storing and holding grain for future sale or delivery, as the necessities and demands of the market required.

The practice, with many variations as to local treatment, was gradually extended to the whole grain producing section of the United States east of the Rocky Mountains, and has proved an important factor in facilitating trade between widely scattered traders and markets, and up to within a few years ago American certificates of grade, covering shipments of grain from our Atlantic and Gulf ports, were accepted, practically without question or complaint, but during the past dozen years much dissatisfaction has been manifested from different quarters, both at home and abroad, because of the unreliability of the inspector's certificate of grade.

The causes for this dissatisfaction are many, the principal one being that while the question of grades and standards is manifestly an interstate and international one, yet there is no central power or authority for fixing and maintaining these standards, and consequently there are as many standards as there are points of inspection, and these standards are liable to change at will, without notice, as often as the authorities at any one point see fit to have them changed.

The wide variation in the commercial values of the world's cereal crops, and the many circumstances affecting these values, have brought about the inauguration of many methods and systems now in use in the grain trade, whereby each particular circumstance may be quickly and universally understood with the least possible amount of negotiation and explanation on the part of the buyer or seller of grain. Prominent among these is the system of grain inspection certificates, by which an attempt is made to determine and fix the values of the different kinds and classes of grain so far as their quality is concerned; and it seems perfectly reasonable to argue that if the standards for the grades shown on these certificates are not stable and consistent, then the system is worthless and not only defeats the purposes for which it was instituted, but also works great harm, not only to the producer and consumer of grain, but to the grain dealer as well, in that a lack of confidence in the integrity of the certificates will militate against the sale of and prices paid for our grain. Especially is this true in relation to our export trade.

For several years after the inception of the idea of grading grain according to numerically arranged grades, no attempt was made to regularly organize a corps of inspectors under competent authority, each inspector following his vocation independently and on his own responsibility, individual certificates of inspection being valued according to the inspector's standing and reputation for square dealing, intelligence and integrity in his work. It was, therefore, essential, in order to intelligently fix the true value of an inspection certificate, that the dealer negotiating it should have some knowledge of the inspector, and although the system has been in use in one form or another for nearly fifty years, this holds true of different markets to the present day. There is no one circumstance that

reflects so truly the integrity of a grain market as the quality of its inspection and the reliability of its inspection certificates.

The first regularly organized grain inspection department was established in 1858 by the Chicago Board of Trade, which act gave to the inspectors under its control and their inspection certificates the official standing of that body. Other grain markets in different parts of the country have from time to time followed this lead and have organized grain inspection institutions under control of their respective commercial bodies, some with and some without the authority of the laws of the states in which they are located. These early organizations, for the most part, were operated upon what might be called the "fee system"; which is to say, that while the chief inspector received his appointment from the governing commercial body, yet he operated the department as his own business, receiving all fees and assuming all responsibilities and liabilities, including the salaries of his assistants as well as claims for damages brought against the department. In most cases a fixed sum was guaranteed to the governing body out of the receipts.

This plan was adopted for the probable reason that in the beginning many influential members of the grain trade looked upon the general plan of grain inspection as an innovation not likely to promote the welfare of the grain trade, and especially that of organized commercial bodies, and who regarded the assumption by those bodies of responsibilities that promised to accumulate claims for damages against the institutions on account of errors, wrong inspections and the possible dishonest acts of inspectors, as a doubtful venture; besides, it was a serious question if patronage enough could be secured to support these inspection departments. However, men were found to fill these positions, who in the aggregate made money out of them. Gradually, and as confidence in the inspection scheme grew and the responsibilities were shown to be light or easily avoided, the governing bodies, one by one, took over the management as well as the responsibilities of these departments, reducing the inspectors and their assistants to a salary basis, until at the present time there are but two inspection departments of any prominence operated upon the fee arrangement.

Grain inspection under state authority and administration was also first accomplished at Chicago by the state of Illinois in 1871, and was followed in turn by Minnesota, Missouri and Kansas, whose laws for the purpose are similar. The state of Washington has and the territory of Oklahoma also had laws relating to the subject, but their functions are only nominal. There are, therefore, only four states in which definite laws exist under which the inspection of grain is administered. In all others, excepting Washington and Oklahoma, the inspection departments are organized and administered by commercial bodies in the different grain markets in which they are located.

Generally speaking, the inspection departments are organized with a chief inspector as executive officer, who directs and supervises the work of the department. The right of appeal from his decisions on grades is usually provided for in the appointment of appeals committees, which committees are supposed to represent the various grain interests of the state or particular market in which they are located.

In the beginning of the numerical grade system it was found necessary, for the guidance of the inspectors and the trade, to formulate certain rules and specifications for grain grades; but as nature creates no two things exactly alike and we find in cereal grains a certain range in each class of size, composition, development, moisture content and general character, and because of the consequent difficulty in definitely fixing by rule the points separating one grade from another, on account of this gradual range from top-to-bottom values, it was found imperatively necessary that these rules and specifications be not too definitely worded, and that the inspector and the governing authority be

*Address by John D. Shanahan, Expert in Charge, Grain Standardization, Bureau of Plant Industry, United States Department of Agriculture, before the Maryland Corn Breeders' Association, Baltimore, Md., December 3, 1907.

allowed a wide latitude in the interpretation of the same. Unfortunately, this situation has been taken advantage of in many ways, often to promote selfish interests, and has resulted in more or less confusion and misunderstanding and placed the American system under suspicion in many quarters. It is at this point that Grain Standardization enters into the subject, in an effort to work out ways and means for grading grain according to definite standards of value, and to eliminate as far as possible the element of individual judgment, upon which the inspection of grain at present depends almost entirely.

The methods in use in the practice of grading grain up to a few years ago answered very well under conditions then existing, for the reason that farms were comparatively small; better care was taken of their products, and when those products were put upon the market they were in better merchantable condition than is true at the present time, and it was not thought possible to ship grain until it was dry and in proper condition. It was then the usual and common practice to market "old crop grain," or "grain of the previous crop," long after a new crop had been harvested and was being made ready for market. Grain of a very poor quality, or in very bad condition, seldom found its way to market, and when it did so, it commanded only such relative prices as were commensurate with its quality. In those days the grades of grain could be depended upon to be nearly uniform in all markets.

Many advances and improvements in the methods of storing, transporting and marketing of grain and in the manufacturing of grain products have been accomplished during the past twenty years. Not so with grain inspection. In fact, these changes and improvements have only added to the inspector's confusion, which is much to be deplored, as the grain inspector has become an important factor in the American grain business, and his work concerns directly, not alone the grain dealer, but the producer and manufacturer as well, and our foreign grain grade as a nation has also been directly affected by his work.

Some of the causes which have added to the inspector's difficulties during the last few years are matters over which, unfortunately, under existing conditions, he has little or no control—the wide and rapid extension of the grain raising territory, and particularly the growing of wheat in the Northwest upon extensive ranches, or estates, where loose methods of farming are found to be more or less profitable, and where in many cases nothing but wheat has been raised year after year for many years, with a consequent deterioration of the soil and product and an increase in the production of weed seeds and other objectionable matter; the raising of vast crops in the Southwest for which adequate provision was not made for the proper housing and care, and the consequent deterioration from the inclemencies of the weather; the practice of storing corn during the winter months in open rail cribs, or pens, without proper covering, whereby it is allowed to absorb and retain moisture instead of curing and drying out, and the consequent enormous losses sustained by its deterioration in storage and in transit during the following spring and summer; the introduction of new kinds and classes, and the cross-breeding of different varieties, of grain, of which it is difficult for the inspector to keep informed; the enormous growth in the volume of the grain business and the consequent necessity for quick dispatch in handling; the enormous increase in the size of ships, railroad cars, and other facilities for, as well as changes in the routes and zones of, transportation. An example of this last feature has been the enormous amount of grain from the Mississippi Valley that has for the past few years been transported to ports on the Gulf of Mexico for export, instead of the Atlantic ports as formerly.

Another feature is the enormous increase in the amount of garlic, or wild onion, that is grown

with wheat, particularly in this section of the country. Most of this garlicky wheat is exported, and bitter complaints are received from the foreign receiver on this account. The loss in value from this source is inestimable, and there can be no doubt that it affects, to a more or less degree, the values by reflection of other wheats shipped through any market that handles it. Something should be done toward the possible eradication of this evil, as there is no question that it materially reduces the demand for wheat from this section of the country, and also materially affects the prices paid for it. Unfortunately, this evil has gained some ground in certain sections of Illinois and the surrounding country.

These, and many similar causes, contribute to the confusion of the grain inspector, which, considered along with the indefinite rules and specifications which are made up for his guidance, and the fact that the inspection itself is used as a means of competition between different markets, will comprehensively explain why there is dissatisfaction with our American system. Nevertheless, the American grain inspector, if he were free from diverse influences, stands to-day in a better position than any other individual to assist in a general improvement and enlargement of our cereal crops, to accomplish which the United States Government and the governments of several states are spending vast sums of money yearly, while for the most part his work has either been of a negative quality in this respect or has had the effect of nullifying efforts in this direction to a great extent, because he has allowed the indiscriminate mixing of poor grain with good to an extent of leading, at least, some foreigners to believe that there is no good grain grown in this country. This was exemplified but a few days ago by a German miller who visited my office after having visited several of the large Western grain markets, and who told me that he had seen better wheat since being in this country than he had ever seen in his life, and that he never before knew that such good wheat was grown in America; and who also stated that he had refused for the past two years to buy or mill any American wheat because of the poor quality and condition in which it had been laid down in Germany.

There is no good reason why the producer of good grain, who through advanced knowledge and years of careful and patient work has produced an excellent quality of grain, should be compelled to assist in marketing the grain of the poor or careless farmer. That there is some good excuse and reason for a rational mixing of grain, I am willing to admit, but I also believe that this mixing has been abused to an extent that has materially injured the prices that could be obtained for the better qualities of our grain.

Investigations into the status of the American grain inspection question and its effects upon and relations to the grain business, including the producer, have been carried on for a number of years by the Department of Agriculture by authority of Congress. The scope of the investigation has been wide and has taken in the whole of the United States and the markets in Europe where our grain is sold. In a general way it was found that there existed much confusion of ideas about grain inspection, especially on the part of the foreigner. American certificates of inspection, in some cases, having the word "official" printed upon them, led to a more or less definite conclusion in Europe that the Federal Government was responsible for, or at least supervised, the inspection; that a gradual deterioration in the standards of our grain grades had been taking place, mainly because of competition between different markets established at export points; that not much dependence was placed by many foreign buyers of our grain upon our inspection certificates; and there also appeared to exist a tendency to avoid responsibility for them,

on the part of the inspector and the authorities issuing them; that there was a general confusion of ideas as to what should constitute the different grades and how the different rules and specifications should be interpreted; that when an inspection certificate is issued covering a shipment of grain, no adequate protection is given to the grain in order to preserve the identity and integrity of the grade against manipulation in transit, at transfer and transshipment points and until it reaches the consumer; that the condition under which the inspector is obliged to work is not conducive to just and uniform results.

The moisture content, color and composition, as indicated by the texture of most grains, are important factors of value; yet the inspector is obliged to pass judgment on and grade these grains often in the open, with the temperature many degrees below the freezing point, with cold hands and the grain often frozen solid. He is also obliged to do this work in cars and other vehicles of transportation placed in position under bridges, in the shadow of buildings, where sufficient light is impossible even on bright days; and often the demands of commerce for despatch oblige him to inspect and grade grain at night by artificial light, under which conditions intelligent, just and honest work is impossible.

Perhaps the greatest difficulty that the grain inspector encounters in his work, as well as the greatest the grain dealer encounters in his business, is the heating and spoiling of grain in transit and storage. This is especially true of corn; and the primary cause is an excess of moisture, influenced largely by the temperature. The "germinating season" is a common term used in the grain business to designate a period in the spring when the excess moisture and the temperature in commercial corn are usually in that condition where the relation between them is right to start germination. There is no such thing as a definite germinating period, because if these conditions are right the effect will be the same at any season of the year. The cause of this heating is due almost solely to the relation of moisture and temperature, together with the fineness of the particles, rather than to any inherent quality in the grain to germinate at any particular season of the year.

For example, a sample of cornmeal containing 14 per cent of moisture might keep perfectly well at 60 degrees, while the same meal would heat if the temperature should be raised to 90 degrees. At the higher temperature the meal would not be capable of holding 14 per cent of water and in the attempt of the thus superheated moisture to liberate itself heat is generated, some parts becoming more moist than others; and when the action once starts it increases rapidly. If the bulk is small, so that the moisture can escape freely when liberated, no heating will result. These same conditions exist in a more marked degree in the case of corn during the early spring and summer, if the corn is shelled and stored during the winter months, when the temperature is low and while the corn still contains a relatively high percentage of moisture. As soon as the weather begins to warm up in the spring, the temperature in the bulk of grain likewise rises. Moisture is liberated in the grain in the portion of the bulk first affected, only to be condensed on the other grain which is still at a lower temperature, and in the re-establishment of the equilibrium within the kernels the increase in temperature is greatly accelerated and the corn is soon hot.

Grain of any kind, if once thoroughly dried, can be kept indefinitely in storage without heating, provided the moisture content remains the same and the temperature of the surrounding atmosphere is not raised beyond that at which the drying is done. In fact, the whole question is one of moisture versus temperature. Up to

very recently it was not possible in a practical way to ascertain quickly the moisture content of grain so as to be able to apply the test to inspection and grading of same, but thanks to the ingenuity and perseverance of Dr. J. W. T. Duvel and Mr. Edgar Brown, scientists in the Department of Agriculture, who have produced the apparatus for quickly measuring this moisture, we are now able to do much toward finding a safe moisture basis by which grain can be kept from spoiling in storage and transit; and we have every reason to believe that, when once this point has been found and demonstrated, a great part of the trouble experienced by the grain trade with heating grain, especially corn, will be eliminated.

In concluding, I desire very much to say a few words to you gentlemen in connection with the relations which, in my judgment, should exist between the seed-grain breeder, and especially the seed-corn breeder, and the grain inspector. Judging from what I have been able to learn about his work, the seed breeder's aim is especially to produce grains that will give large yields per acre, together with some other very important factors, none of which are to be in any way deprecated; yet it seems to me that one important factor and one that has especial bearing on the commercial value of the grains is either given slight attention or has been entirely overlooked, and that is, the producing of a grain that will mature early enough so that it may be properly cured for storage and shipment. There can be no question that the enormous losses sustained by the producer, dealer and consumer of grain alike, during the past few years, from grain that would not stand storage and shipment, have had a detrimental effect upon the prices that the producer has been able to procure for it. The intelligent grain inspector understands, or should understand, this feature thoroughly; and perhaps it is the one that he understands most thoroughly at the expense of others that are just as important to you and your interests.

My advice to you and to the seed breeders of this country is to get in close touch with the grain inspector and to see to it that the results of your work and the conclusions to be drawn from it reach him in the form of all literature published upon the subject; also to see that he gets any and all literature issued or published by the different experiment stations. There are some few intelligent men among them who will appreciate first hand whatever knowledge of the subject you may be able to impart to them, but as a rule, they are men who give little thought to the feature of the grain business that your work comprehends. From his environment and training you will at first find him inclined to be a trifle narrow and not inclined to broaden his views. He is content to follow precedents already established, and perhaps will not be open to conviction from your arguments; but if you persist and make an endeavor to "get under his skin," so to speak, I am quite sure that he will have a message for you, as well as you for him, that will redound to the benefit of both.

The Dan R. Hanna of the Pioneer Steamship Co.'s line took out the record cargo of flax from Duluth on November 23—403,000 bushels; 200,000 bushels of this load was taken from the Consolidated Elevators and 203,000 bushels from Elevator S.

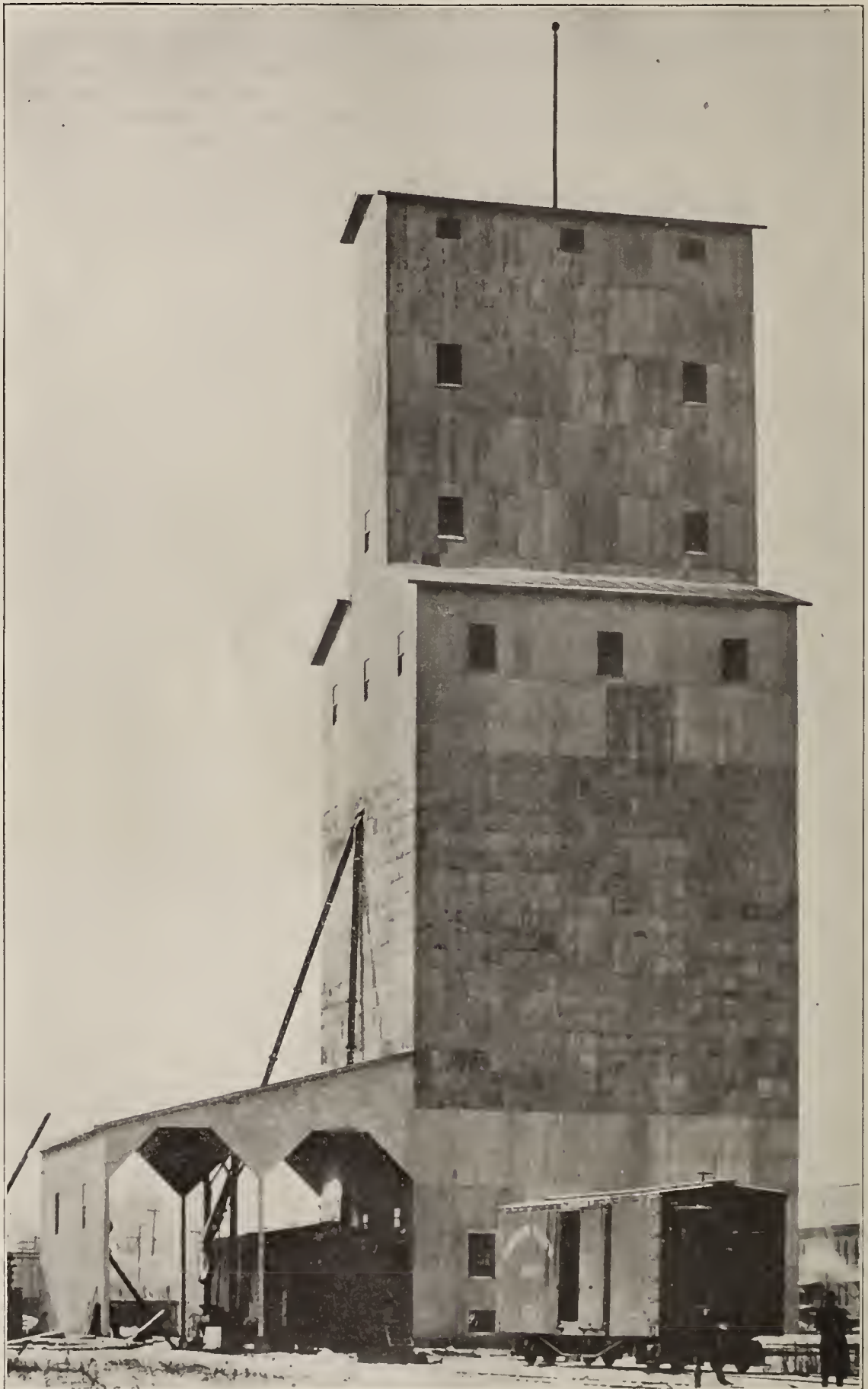
Specimens of corn wheat grown at Perris were recently on exhibition at the Chamber of Commerce at Riverside, Cal. The new variety of wheat produced 60 to 90 bushels to the acre, and had the appearance of barley in the field. It was grown by H. M. Harford, a newspaper man, and is said to have the value of corn as a feed for hogs and poultry.

A NEW ELEVATOR AT BATTLE CREEK, MICH.

The new 50,000-bushel transfer and cleaning elevator in process of construction for the past three months by the Burrell Engineering & Construction Co. for McLane, Swift & Co., at Battle Creek, Mich., was completed December 1, and is now in operation. It is of crib construction on a foundation of concrete and is covered with galvanized iron siding and roofing. There are 22 bins in all, of capacity

one 40-horsepower and one 10-horsepower Fairbanks, Morse & Co. electric motors. The power transmission machinery was furnished by Skillin & Richards Mfg. Co., Chicago.

That bright and independent hebdomadal, New York Life, says: "Wall Street calls it the Roosevelt Panic," and adds: "The President may have frightened that timid thing called credit, but it is even more true that our big financiers, the men who held the people's money, were not faith-



McLANE, SWIFT & CO.'S NEW ELEVATOR AT BATTLE CREEK, MICH.

2,200 bushels each. Grain is received from two tracks by means of belt conveyor and either transferred or cleaned.

The machinery equipment consists of one No. 9 Monitor Double Shoe Separator; one No. 9 Monitor Wheat Scourer; two pairs of elevator legs, capacity 50,000 bushels per hour each; two pairs of Clark's Automatic Shovels; one No. 43 Prinz & Rau Perfection Dust Collector; one 1,600-bushel Fairbanks Hopper Scales; two bifurcated loading spouts.

The power is furnished by two 30-horsepower,

ful to their trust. They had come to regard the money in their hands as theirs to gamble with. What they were doing was practically the same as stealing. It was theft, but in large amounts. The right name for the recent crisis is, the Grand Larceny Panic."—Pope & Eckhardt Co.

The W. M. Mills, of the Weston Transit Co.'s line, took out the then record cargo of wheat from Duluth on November 21, 415,799 bushels of spring and durum wheat, loaded by Spencer-Moore & Co. and Ames-Brooks Co.

CORN STILL TOO DAMP.

Corn still continues to be very damp, too damp to ship, in fact, with any degree of safety. At Toledo in a series of tests covering the period from November 12 to December 4, the least amount of moisture found was in one lot of No. 2 mixed ($\frac{1}{8}$ new), 15.4 per cent. Only in three cases did the percentage fall below 19, and these exceptions were 18, 18.4 and 18.6 per cent respectively. In the majority of cases the percentage was above 20, and percentages as high as 23, 23.4, 23.6 were found—even 25.2 per cent in the case of a sample of Ohio corn which after kiln drying showed 16.2 per cent. Indeed, a central Ohio dealer wrote King & Co.: "We are not handling any new corn so far this season. We have never seen corn in as bad condition as it is this season. It does not get any dryer as the season advances. We think one-half of this year's crop of corn will never get to market and look for a lot of musty and moldy corn to come out of the cribs."

In central Illinois a large amount of corn contracted for before harvest at 50 cents is still too damp to market and it is likely to be some time before the elevators get it. A writer on the Bloomington Pantagraph said that on November 26 he saw at Downs two cars of corn being shelled. One was yellow and in excellent condition for this season when put into the crib. The white corn was also in good condition when cribbed, though not so dry as the yellow. When shelled both were very damp and not fit to ship, though not moldy in the crib. Said the buyer: "Nothing but continued dry, freezing weather will ever put the corn in condition to ship. It never got ripe; that is one reason it will not dry out." R. M. Hall of Downs, buyer for the Zorn Grain Co., is of the same opinion. "Continued freezing," he said, "should help to get the corn into condition. The truth is it ought to have been allowed to dry upon the stalk." Mr. Hall spoke to the Pantagraph man of another practice that does more harm than good, that of contracting grain before it is ripe or even grown. He said: "It is a fraud upon both the dealer and the farmer. Why, we did not until recently think of contracting corn until November. Now it is done in September and often in July and August, before it is in roasting ears."

"Why should the farmer turn speculator? Why should he take the risk of selling his oats before they are half grown, when it is not possible for him to know whether he will have any oats to fill his contract? Why should he contract his corn before it is ripe? If his grain is in good order he can always sell it for cash. When he has the grain is the time to sell it; no other time is safe or right," suggests the Pantagraph.

"Soft corn is going into cribs this fall in a way which will make lots of trouble, should we have even a mild winter," said the Indiana Farmer. "We should remember the lesson of only a few years ago. Soft corn was then dumped into tight cribs along in October and early November. The bulk of it came out in the spring in very poor condition and had to be marketed at a serious loss. The winter was open and the early spring was soft. There is more soft corn this fall than we have had for three years. If hard freezing weather comes on it will keep until the spring thaws, then look out for it. It may take more time, but the safest plan is to sort out these sappy ears, as you unload the wagons, and feed them this fall."

Price Current says: "It is apparent that a liberal movement of new corn cannot be expected before the first of the year. The lateness of the crop caused some of it to mature under the cool weather conditions of early October, and thus the normal period of the finishing process was much delayed and cold weather found the grain green instead of dry and brown, as it should have been incident to a normal season. This condition is now reflected in the husking returns, showing that there is too much moisture and freshness in the crop now being gathered. This unsatisfactory situation may be re-

sponsible to some extent for the general tenor of the reports as indicating disappointment in the outturn, and favorable weather for bringing the corn into a hard and better keeping condition may be calculated to change the outlook to more favorable shaping."

"There is plainly evident a disposition to increase the shipments of new corn from country stations in this state, and again we caution our friends to be sure to avoid all green, immature and damp stuff, which brings good prices now, condition and quality considered, but which will, with any fair increase in arrivals here, as surely decline sharply and rule very weak, because the demand is limited, chiefly from local consuming industries, and, therefore, the market is in no condition to absorb it freely. There is little disposition to work the dryers extensively because the facilities for financing in the East are too uncertain and unsatisfactory," said Pope & Eckhardt Co. on November 20.

CHARLES N. MILLER.

We publish this month a portrait of Charles N. Miller, who for several years past was the writer of the market letters of E. W. Wagner, grain mer-



THE LATE CHARLES N. MILLER.

chant of the Board of Trade, Chicago. An extended obituary notice of Mr. Miller's death was given our readers last month, but it seemed fitting as a tribute to his worth as a man and ability as a writer to present this picture this month. Mr. Miller leaves behind him the imprint of a noble character and a reputation for everything that was just and honorable in a business associate.

INSPECTION AT SUPERIOR.

The long-drawn-out grain inspection row at Superior, Wis., has come to an end, apparently, by an agreement of the various interests involved, on the following basis:

The Wisconsin Grain Commission to do all weighing in and out.

Wisconsin inspection of all coarse grain, including barley, rye, corn and oats, in and out.

Wisconsin inspection of wheat and flax in and out when requested by the owners.

Mills and elevators to buy grain in Superior without discrimination against members of either Superior or Duluth Boards of Trade when usual commission is charged.

Globe [Peavey] Elevator will receive Wisconsin inspected grain, without preserving the identity, at the usual charge and will furnish special bins upon a basis of payment for the entire bin of a capacity of 25,000 bushels.

Elevators will issue warehouse receipts under the general warehouse law of Wisconsin.

Wheat and flax will be inspected as in the past, except when requested by the owners.

The elevator companies agree to pay the Commission for moneys expended in the grain inspection war not exceeding \$10,000.

All suits except cases in the Federal courts to

be dismissed without costs to either party. The moneys paid into court to be returned to the elevator and mill companies.

The injunction in the Federal court to be modified to carry out the agreement.

This agreement to begin on January 1, 1908, and remain in force until January 1, 1910.

The settlement is satisfactory to Mr. Macfadden, representing the North Dakota Bankers' Association and the wheat growers of that state, to whom a good deal of the credit is said to be due for the new status. The Duluth Commercial Record says: "The settlement of the inspection differences at Superior, permitting the elevators there to become regular under board rules, will probably be hailed with more satisfaction by the Superior banks than any other interest over there; because it will furnish them with an outlet for loaning their surplus funds on the best collateral in the world, terminal elevator receipts."

How about the Superior Board of Trade—does it get a "clean bill of health," too?

The Globe Elevator Co. having paid in to the Wisconsin Grain Commission \$10,000 in disputed fees, the Commission is in funds and will resume inspection and weighing operations on January 1, 1908. The Commission will have to be reorganized, however, and at once, W. C. Macfadden of North Dakota being the only member whose term has not expired. Byron Kimball and H. A. Johnson of this city are holding over as members until their successors are appointed and shall have qualified. A chief will have to be appointed and his assistants named.

REAL CORN IN CHARLESTON.

Charleston, S. C., was the scene of as much suppressed excitement as that staid and proper city could be expected to tolerate, the occasion being the unloading of "ten thousand hushels of genuine South Carolina corn on the ear with the shucks about them," consigned to F. W. Wagener & Co., from the plantation of the N. H. Blitch Company, located at Meggett's. "It has always been the prevailing custom for the firms in this city," says the "News and Courier," "to buy Western corn, which comes in sacks and in a shelled condition. The enormous crop in the vicinity of Meggett's and Yonge's Island has caused this departure from the old lines of business, and judging from the indications given by the large shipment now in cars at Brown's wharf it would seem as if the Palmetto state will in the near future supply her own wants in corn, and also those of her neighboring states."

"Such a sight as that," continues the News and Courier editorially, "has never been seen in the town—at least since the War—an object lesson that might well inspire the efforts of all who are sincerely interested in the development of the agricultural possibilities of the coast country of South Carolina;" and visions rise before the editorial subliminal mind of "real cornmeal batter-cakes in every well-regulated household in Charleston for many days to come. Talk about breakfast foods and make-believe coffee and excelsior shavings for the dyspeptic inner man, there is nothing to compare in nutritious quality with breakfast, dinner and supper food made of the corn products from Yonge's Island, the richest and most progressive trucking district in the world."

But the more practical and prosaic reporter fresh from the water front says the corn would go for feed. "The corn, if milled, is not claimed to be as fine as some other grades for the purpose of making grits, although fine meal for the use of man can be obtained from the grinding of it. As a stock food it is without any comparison, leading every other grade by a long distance."

This corn is planted after the spring truck season is completed, and the average yield without fertilizing is put at 50 hushels per acre, but yields as high as 100 bushels were reported in the vicinity of Meggett's. The price realized was 60 to 80 cents f. o. b. Meggett's.

ARMY OF THE CORN.

Ho! Behold the summer's promise stands revealed upon the hills—
Bivouacked, an army campeth by the ever singing rills!
From the shock tents of the soldiers, shedding sunlight
back to sun,
Nods the tasseled flag of Plenty—for the season's fight
is won!

In the golden glow of morning, see the Army rise from
mist,
Throwing off its blackened mantle, loosing shackled limb
and wrist.
By the pickets that protect it stand the cattle, wonder
eyed
At the bladed horde of Ceres, at the Army's stalwart
pride!

In the hedge rows by the border skulk the quail, a
frightened brood;
Nut brown pheasants whirr and gather at the mess
tents for their food.
Hark! Across the tented valley comes the baying of the
hound
And the echo of the bugle with its quaver, round on
round!

See! The Army wakes, to quiver with the zephyr's ebb
and flow!
Now the reveille is sounded by the North Wind's lusty
blow.
Ah! It wakens not to slaughter, but to Peace and Hope
and God—
To the heraldry of Plenty and the Bounty of the Sod!

Over all the sun is shedding tangled gossamers of light,
Tipping Ceres' band with glory, crowning Ceres' brow
with might—
Aye, the promise of the summer stands revealed from
Plenty's horn
In the rows of tented soldiers in the Army of the Corn.
BYRON WILLIAMS.

COMMUNICATED

[We invite correspondence from everyone in any way
interested in the grain trade on all topics connected
therewith. We wish to see a general exchange of
opinion on all subjects which pertain to the interest of
the trade at large, or any branch of it.]

DID YOU HAVE LONG MAY CORN?

Editor American Elevator and Grain Trade:—
Will you kindly place this in a conspicuous place
in your next issue so that all may see it:

"Any person or firm that had long May corn
closed out on a stop-loss order at 55c on the Chi-
cago market of November 13 will confer a favor on
the undersigned by naming the amount and, if they
so desire, the firm that closed the deal; or in other
words, did anyone buy May corn at 55c on that
market?" Yours truly,

Delavan, Ill.

E. M. WAYNE.

ARE BUILDING.

Editor American Elevator and Grain Trade:—
We are building a 10,000-bushel capacity elevator
at this place. The size of the building is 30x30
feet; pit, 12 feet; concrete work up to the work-
ing floor, with the latest improved machinery, in-
cluding a 26-horsepower gas engine, dump pit,
wagon scales and 300-bushel hopper scales.

We have all the machinery now on the ground
and when completed we will have one of the best
elevators, for its capacity, in Missouri. It is located
on the Wabash R. R. line from Kansas City to
St. Louis, and we would be pleased to show your
representative through it at any time he may hap-
pen this way.

Yours truly, WAKENDA ELEVATOR CO.,
Wakenda, Mo. Per W. F. Circle, Manager.

INSPECTION IN KANSAS.

Editor American Elevator and Grain Trade:—
At a conference of elevator owners and operators,
held in Kansas City on October 31, the elevator
men decided to ask for a conference with the Grain
Commission of Kansas, to induce them to adopt
the Minnesota plan of inspecting grain. Under the
Minnesota system the inspection certificate is sup-
posed to show the percentage of dirt in the grain
inspected.

We contend that it will be a physical impossibil-
ity for our inspectors to determine with any degree
of certainty the per cent of dirt or foreign matter
contained in cars arriving at Kansas City, and if
such rules were established, there would be a con-
stant friction between the buyer and the inspection
department, thereby causing delay in delivery of
grain after being sold, and the shipper would be the

loser. As all samples of grain drawn from the cars
are delivered on the exchange floor before sale is
made, we contend that the purchaser buys this
grain as it appears to him and if it contains for-
eign matter he makes a difference in price, as it
should be. Further, grain shipped to the Kansas
City market grading below No. 3 is largely pur-
chased for export, where no dockage is made on
account of dirt or foreign matter, but where the
wheat is graded on its own merits and full weight.
This move on the part of the elevator interests
is simply a subterfuge on their part to continue
their long continued graft upon the shippers of
Kansas.

We cannot believe that the Grain Commission
will consent to a change in Kansas rules which
will enable the Kansas City elevators to continue
this graft. This action the part of the elevator
interests in Kansas City was not thought of until
the prosecuting attorney of Wyandotte County noti-
fied them that the deduction of 100 pounds from
every car of grain was in violation of Kansas law
and must cease. They did not deny that the 100
pounds was being deducted, but claimed that as
the grain was being merchandised in Missouri they
were not liable under Kansas law.

I beg leave to quote you from letters received
from James M. Meek under date of October 22 and
24, which will speak for themselves:

"In response to your 'phone request this morn-
ing, relative to the grain cases, I wish to say that
after our conference with Attorney-General Jack-
son on the 15th inst., I went to Jefferson City
and had a talk with Attorney-General Hadley and
Governor Folk in relation to the prosecution on
account of the deduction made at the Kansas
City market. Our conference was very satisfac-
tory and I have an appointment to meet J. T.
Brodnax and Mr. Stone to get the question
settled without having to institute suits in rela-
tion to this matter."

Later:

"At the conference between Brodnax, Stone
and other members of the Board of Trade and
myself no definite agreement was reached. After
a lengthy discussion it was agreed that J. T.
Brodnax, J. W. Radford and myself would take
the matter up again upon Mr. Radford's return
to the city. In a written communication delivered
to Mr. Brodnax at the time of the conference we
notified the Board of Trade that inasmuch as
the 100 pounds deduction has been a rule or
custom of that market for the past decade, we
felt it our duty to notify them that they would
be allowed to revise their rules and regulations
and comply with the Kansas law within our juris-
diction. They seemed anxious and willing to abol-
ish the rule, but insisted that the elevators
should not be compelled to pay the same price
for dirty grain as they paid for clean grain, and
that if the state inspection would show the
condition of the grain coming into this market
in this regard the rule would be abolished at
once. This is a matter over which we have no
control, and shall insist that the rule be abolished
at any event."

At the request of James M. Meek, prosecuting
attorney for Wyandotte County, the writer met
him and Mr. Radford in his office and Mr. Radford
stated that it would be a physical impossibility for
his department to determine the percentage of
dirt or foreign matter contained in cars arriving
at that market. As secretary of the Kansas Grain
Dealers' Association I refused to make any conces-
sions whatever, and insisted that Mr. Meek at once
commence an action in the name of the state to
stop the dockage practice.

Mr. Meek requests that each member of this
Association furnish his office with weight certi-
ficates and A/S of grain handled through the ele-
vators on the Missouri side, which should be for-
warded to James M. Meek, Assistant County At-
torney of Wyandotte County, Kansas City, Kan.

Very truly yours,

Topeka, Kan.

E. J. SMILEY.

REPORT ON SHORT WEIGHTS AT MEMPHIS.

Editor American Elevator and Grain Trade:—
I herewith hand you a copy of a report of a special
committee appointed to investigate alleged short-
ages in weights in the Memphis market. This
complaint was made by the Illinois grain dealers

at a meeting held at Peoria, and the record of their
proceedings was published in the grain journals.

The Memphis grain dealers generally feel that
a publication of this character prior to investiga-
tion was an injustice; and knowing your attitude
toward the trade generally and that you stand
for fair play and justice, I am requested to ask
that you publish this report in full and give as
much prominence as possible.

Very truly yours,

Memphis, Nov. 30. N. S. GRAVES, Secretary.

N. S. Graves, Sec'y Memphis Merchants' Ex-
change—Dear Sir: The undersigned committee,
appointed to investigate the complaints concern-
ing the alleged shortage in the weights of grain
as set forth in a communication from Mr. S. W.
Strong, secretary of the Illinois Grain Dealers'
Association, under date of October 21, to the
president of the Memphis Merchants' Exchange,
begs to submit the following report:

The committee in person visited the elevators
and warehouses at which the cars complained of
had been weighed, examined the original records
of entry, including scale tickets covering each
car located, and rechecked the same with the
records in the chief weighmaster's office. The
committee also examined the methods of weigh-
ing at each plant, and tested the scales at all of
the elevators. The method of testing scales
adopted by the committee was to weigh grain in
bulk over the hopper scales, and then weigh the
same grain over the automatic sacking machine;
and further confirming the correctness of the
weights by weighing a certain number of sacks
over approved platform scales, thereby giving
three weights on every test.

The committee found that the system prevail-
ing at the different plants was carefully de-
vised, and that the records were kept in an ac-
curate manner and in such a way as to eliminate
error so far as any human precaution can ac-
complish this end.

The committee can positively assert that every
scale examined was found to be in first-class
condition and weighing correctly, as was evi-
denced by the triple test to which each scale
was subjected.

In carefully analyzing the statement of 127
cars furnished by Secretary Strong, and checking
them car by car, the following results were ascer-
tained, viz.:

Number of cars not sealed.....	19
Number of cars in leaky condition.....	23
Number of cars of which no record of weights could be found.....	14
Number of cars containing oats and ear corn in same car	1
Number of cars of which no car numbers were furnished	9
Number of cars in good order.....	61

Total127

It will therefore readily be seen that, of the
127 cars complained of, sixty-six cars, or over
one-half, should be eliminated from the com-
plaint, for the reasons as shown in the tabulated
statement above. Nine cars were added to the
statement in a lump, evidently for the purpose
of swelling the volume of complaints, as it was
impossible to check these cars without the car
numbers.

Of the fourteen cars mentioned in the forego-
ing statement, of which no record could be
found, seven cars were shipped to other markets,
and destination weights were evidently furnished
shipper and two cars were weighed by private
weights, and these nine cars are therefore not
properly chargeable to the Memphis Merchants'
Exchange Bureau. It appears that these cars were
shipped by the principal complainant in this mat-
ter; and we are confident that said shipper knew
at the time that they were not weighed under
the auspices of the weighing bureau of the Mem-
phis Merchants' Exchange and that said shipper
simply threw them in for good measure.

One hundred and eight of the cars reported con-
tained oats, practically all of this year's crop.
Of this number, nineteen cars graded No. 4, on
account of being very damp, and ten graded "No
grade," on account of being "hot and heating."
The rest of the oats were No. 3, and were all
more or less damp. It is a well-known fact that
damp oats, of such a character as this year's
crop has been, will dry out materially in trans-
portation and rehandling, and thereby shrink con-
siderably from the original weights.

We note that the Mattoon Grain Co. reports
six cars as showing a loss of 4,060 pounds. The
invoices furnished by them to the consignees
would indicate a much larger loss, and it is there-
fore evident that their reports are inaccurate
somewhere.

Your committee is very strongly impressed by
the fact that one-half of the cars complained of

were shipped by the Shellabarger Elevator Co. of Decatur, Ill.; and reference was made to them above in the matter of their including nine cars for which they had received no Memphis official weights. Nevertheless, these nine cars were included in the complaint of the said shippers, although they knew that the Memphis Bureau was not responsible for these weights. They were also aware of the fact that nine other cars were received in "a leaky condition," but they included them in like manner in their complaint, thereby showing their willingness to charge against the Memphis market shortages on eighteen cars for which they knew full well that no sort of responsibility rested. Your committee begs to submit the view that this action does not evince the spirit of fairness which we have a right to expect, nor a sincere purpose to reach the real causes which make discrepancies in weights possible.

It has developed in the progress of this examination that the firm which weighed over one-half of the oats complained of by the Shellabarger Elevator Co., being just as anxious as the shippers to locate the trouble and put a stop to the vexatious and annoying complaints, offered in writing to the said Elevator Co. to pay all expenses of any man they might select for a week's stay in Memphis, and permit this man to weigh the entire receipts at their plant and compare the weights returned with the weights of other shippers who have first-class facilities. This proposition, it seems, was ignored by the Shellabarger Elevator Co., but they continued to complain.

Your committee would further report that this investigation has demonstrated that a large percentage of the grain received in this market has been shipped from elevators in Kansas City, Omaha and St. Louis. Official elevator certificates of weight being furnished with each car by the shipper, the Memphis elevators have had a daily opportunity of comparing their weights with the weights from the above-mentioned markets, and the records show an approximate net discrepancy of about one hundred pounds per car, thereby proving the correctness of the Memphis weights. In this connection, we wish to call the attention of the gentlemen complaining to the fact that every scale in Memphis is inspected four times per year by the Inspector of Weights and Measures, an official of the city, who has absolutely no connection with any receiver here. In addition to this, the Chief Weighmaster of the Memphis Merchants' Exchange makes much more frequent inspection of every scale under his supervision. This oversight renders it almost impossible for a scale to remain out of balance for any length of time. Your committee would respectfully demand, through Mr. Strong, that the shippers who are making these complaints furnish us a statement showing their methods of weighing and manner of testing their scales, as we are reliably informed that some of them have very crude and inadequate methods of weighing and keeping records.

In conclusion, your committee wish to state that the standing and character of every firm at whose plants these shipments have been weighed are of such a high plane, that the possibility of their conniving at any dishonest methods is absolutely precluded. But, assuming for the sake of the argument that this was not the case, and laying aside all question of honor and fair dealing, it would be an insult to their intelligence and common sense to assume that their experience of years in this business had not taught them, beyond the peradventure of a doubt, that correct and honest weights are a sine qua non to the successful conduct of any grain business. Secretary Strong has visited Memphis and is acquainted probably with every firm here, and we are confident that he personally knows that every dealer here is just as anxious to locate the trouble as the shippers can possibly be.

Throughout all the ages, we believe, there have been discrepancies in weights of grain, and we very much fear that it will always be so; but there is a proper way for handling such matters in conformity to business ethics, and in a spirit of fair play. These fundamental principles have not been observed by these complainants, when they were so anxious to rush into print with their uninvestigated grievances, thereby doing a great injustice and possible injury to a number of their fellow men, who are just as honest and just as reputable as they can possibly be, and whose methods and equipment for determining correct weights far surpasses their own.

Now, if these complainants are actuated by a determination to force the Memphis receivers to pay them for grain which was not received, we, of course, can do nothing along the usual lines, but would be compelled to seek redress through other channels; but if they are truly honest and sincere in their purpose and desire to locate the cause of these discrepancies, if they are willing to admit that they are no more likely to be infallible than is the Memphis receiver, then we are

prepared to offer them, in behalf of the Memphis grain dealers, the following proposition, viz.:

At our expense, we invite them to select a committee, representative, or expert weighman, to come to Memphis and remain as long as they deem necessary, to examine the methods and weights of every plant doing business under the supervision of our Bureau, it being distinctly understood that they shall have free access to each plant for as long a time as they may desire. Then, if it should develop, as we are confident that it would, that the scales are correct, the methods satisfactory, the records properly kept, and that the trouble cannot be located here, we would demand to have an expert examine the plants of the complainants. In the opinion of your committee, a prompt agreement to this proposition is the only reparation that can be made by the aforesaid complainants.

All of which is respectfully submitted.

(Signed) T. B. ANDREWS,
W. P. BROWN,
J. B. EDGAR,
E. R. GARDNER,
Committee.

HAY ASSOCIATION MEETING.

Editor American Elevator and Grain Trade:—The board of directors of the National Hay Association has ordered me to take a postal card vote, in order to ascertain the date most desired by our membership for the 1908 convention.

In voting on this proposition, members must remember that the National Hay Association now contains over 900 members, fully 300 per cent more than were in good standing seven years ago. There are members in twenty-nine different states, so it will be impossible to fix a date that will be the exact choice of everyone; but it is the earnest desire of the board to choose a date that will be most acceptable to the greatest number.

President Austin is taking hold of the work with an earnest purpose to make his administration tell for the hay interest in every branch of the trade. He hopes to increase the membership to at least 1,000 by the time we meet next summer. If each will give fifteen minutes of his time to see or write some neighboring dealer, his hopes will be realized before January 1, next.

Very truly yours, P. E. GOODRICH,
Winchester, Ind. Secretary.

WHAT THE EXCHANGES SAY.

Editor American Elevator and Grain Trade:—Enclosed herein please find communications from Chicago Board of Trade and Mr. Geo. H. Morgan, secretary of the St. Louis Merchants' Exchange, in reply to resolutions passed at the meeting of Illinois Grain Dealers in Peoria, October 17, a report of which I enclose.

If you consider these matters of sufficient importance, we will be pleased to have them published in the "American Elevator and Grain Trade," as we desire to have the membership of the Illinois Grain Dealers' Association fully advised in relation to all matters, and know of no better way to reach them than through your journal.

Very truly yours, S. W. STRONG,
Pontiac, Ill. Secretary.

Chicago, November 8, 1907.

To the board of directors of the Board of Trade of the city of Chicago: Your special committee, to whom was referred the communication from the Illinois Grain Dealers' Association, together with resolutions adopted by that Association at a recent meeting, desires to report:

First. That Section 15 of Rule XXII, pertaining to interest on advances made on country shipments, is absolutely just and equitable, for the reason that advances are made to shippers with bills of lading as collateral the same as loans are effected by receivers from their banks, based on current rate of interest; and that the expense attached to the proper handling of grain and seeds has materially increased, so much so that it is even unprofitable to accept consignments on basis of members' rates; further, that no unnecessary delay in the unloading of grain is occasioned by the application of said rule.

Second. In order to maintain Chicago as a market, the buyers and the elevator proprietors must be considered important factors as well as the seller, and that changing that part of Section 3, Rule XXII, to make No. 3 Corn, No. 3

White Corn and No. 3 Yellow Corn deliverable on contracts at a discount of three cents per bushel instead of five cents, would be unjust to both buyer and proprietors of regular elevators, especially as experience has shown that winter-shelled corn of No. 3 grades will not remain in condition, no matter what precautions are taken by elevator proprietors, for delivery on contracts during the summer months. Further, the buyers, as well as shipper, must have a reasonable amount of assurance as to the carrying qualities of corn delivered on contracts.

Third. The request for reduction in present scale of charges for the supervision and weighing of grain as recently adopted by the weighing department is unreasonable. The records show that during the year 1906 the average cost to the shipper of weighing grain in Chicago did not exceed 25 cents per car, whereas the average cost in St. Louis during the last year was 47 cents, with an additional state fee; in Kansas City, from 35 cents to \$2.00 per car; with other markets east and south charging higher fees and exacting a dockage of from 50 to 200 pounds; whereas Chicago exacts no dockage and the services at Chicago are admittedly the best.

During the eight months of this year, ending August 31, the cost of maintaining the department was \$75,588.15. The total fees received for weighing during this period amounted to \$68,253.49, or \$7,334.66 less than the actual cost of the service. Any profit the department has made in the past or that can be made this year is but a part of the revenue derived from services performed that have no connection whatever with the fees received from the trade for weighing; and in addition to above, it was deemed a matter of justice and fairness to allow the employees an increase of ten per cent in salaries to correspond with the similar advance granted to all elevator employees. Credit, rather than criticism, is due the weighing department from the country trade, in that fees are below actual cost of services rendered.

MERCHANTS' EXCHANGE OF ST. LOUIS.

St. Louis, October 30, 1907.

Mr. S. W. Strong, Secretary, Illinois Grain Dealers' Association, Pontiac, Ill. Dear Sir: Your communication of October 21, with accompanying resolution of the Illinois Grain Dealers' Association in reference to the rules adopted by the Merchants' Exchange of St. Louis and the Chicago Board of Trade, requiring members to charge interest on advances, was presented to our board of directors on the 26th inst. and had careful consideration.

I am instructed to reply that when the matter was presented to the board the question was duly considered in all its aspects and favorable consideration reached. When submitted for action of the members of the exchange the vote was almost unanimous in its favor. We find that Chicago, Minneapolis, Milwaukee and Kansas City have a similar rule and probably other exchanges. Considering the fact that business is now done on such small commissions, is it not unreasonable to ask the commission merchants or buyers of grain to furnish the money for handling it without being compensated by interest for advances made?

It certainly cannot be a hardship for the grain shippers of Illinois, as the markets of Chicago and St. Louis are reached in two or three days' time, while shipments from Kansas, Nebraska and other Western states are often 10 days to two weeks on the way.

The merchants of these cities certainly would not impose any unreasonable regulations on the shippers with whom they do business, and I am told by our members here that their customers almost without exception cheerfully submit to the interest charge and admit that the rule is both fair and just.

I trust the members of your Association, after further consideration, will take the same view of it.

Yours truly,
GEO. H. MORGAN,
Secretary.

Dr. E. A. Fritter, the assistant in charge of the branch station of the Agricultural Experiment Department of the University of Tennessee, at Tullahoma, Tenn., recently exhibited four large and well-developed stalks of corn from one kernel. There were two large ears of corn on the main, or central, stalk, and one ear upon each of the other three stalks. Dr. Fritter will send one ear to the Agricultural College of Illinois, one to the University of Tennessee, Experimental Department, and the remaining three ears will be retained at Tullahoma.

NATIONAL INSPECTION OF GRAIN.

Following is the text of the bill providing for the inspection of grain in interstate commerce introduced in the United State Senate by Senator P. J. McCumber of North Dakota:

THE BILL.

A BILL to provide for the inspection and grading of grain entering into interstate commerce, and to secure uniformity in standards and classification of grain, and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled, That the Secretary of Agriculture shall organize in the Bureau of Plant Industry of his Department a section of grain inspection and grading, and shall, according to the rules of the civil service, appoint such experts and other employes as may be deemed by him necessary to carry out the provisions of this Act.

Section 2. That said Secretary shall also appoint, in accordance with the rules of the civil service, at each of the following cities, to wit, Portland, Maine; Boston; New York; Philadelphia; Baltimore; Chicago; Minneapolis; Duluth; Superior; Kansas City, Missouri; Saint Louis; New Orleans; Seattle; Tacoma, and San Francisco, and at such other important centers of interstate trade and commerce in grain as he may consider necessary or proper for carrying out the provisions of this Act, one chief grain inspector and such assistants as may be required to inspect and grade grains as herein provided.

Sec. 3. That said inspectors shall be paid a salary or compensation, to be fixed by the Secretary of Agriculture, which shall correspond as near as possible to salaries and compensations paid other officers or employes of the Government performing similar duties.

Sec. 4. That the Secretary of Agriculture shall make all needful rules and regulations governing the inspection and grading herein provided for.

Sec. 5. That said Secretary of Agriculture be, and he is hereby, authorized and required, as soon as may be after the enactment hereof, to determine and fix, according to such standards as he may provide, such classifications and grading of wheat, flax, corn, rye, oats, barley and other grains as in his judgment the usages of trade may warrant and permit. In the inauguration of the work herein provided he may, if in his judgment the best interest of trade and commerce in said grains require it, adopt the standards of classification and grades now recognized by commercial usages or established by the laws of any state or by boards of trade or chambers of commerce, and may modify or change such classifications or grades from time to time as in his judgment shall be for the best interest of interstate and export grain trade.

Sec. 6. That when such standards are fixed and the classification and grades determined upon, the same shall be made matter of permanent record in the Agricultural Department, and public notice thereof shall be given in such manner as the Secretary shall direct, and thereafter such classification and grades shall be known as the United States standard.

Sec. 7. That from and after thirty days after such classifications and grades have been determined upon and fixed, and duly placed on record as hereinafter provided, such classification and grading shall be taken and held to be the standard in all interstate commerce in grain.

Sec. 8. That it shall be the duty of any railroad company, steamship company, or other firm or corporation or private individual engaged in the transportation of grain destined to any state, territory, or country other than that in which it is received for inspection, or received from any other state, territory, or country than that to which it is consigned, to notify the chief grain inspector at the place of destination of any consignment of grain, within twenty-four hours after its arrival, that a shipment, cargo, or load of grain is in its, their, or his hands, and the place of destination of said grain.

That it shall be unlawful for any person herein named to wilfully unload or otherwise discharge any load, cargo, or consignment of grain which has been at any time during the period of its transit an article of interstate commerce, and which has not been inspected in accordance with the provisions of this Act, until the same has been inspected as provided herein.

Upon the receipt of such notice the said chief inspector shall cause the said grain to be inspected and graded in accordance with the classification and standards fixed by said Secretary, and to issue and deliver a certificate of inspec-

tion showing such grade and classification in such form as may be provided by rules prescribed by said Secretary.

Sec. 9. That it shall be the duty of said inspectors to inspect and grade all grain which at the time of inspecting and grading of the same has been shipped from any other state, territory, or country than the state, territory or country in which the same is inspected, or is intended for shipment into any other state, territory or foreign country before the same is unloaded from the car, vessel, or other vehicle in which the same was or is being transported, and to charge and collect from the owner thereof such fees for the inspection of said grain as may be fixed by the Secretary of Agriculture, who shall have the power to fix the rate of charges for the inspection of grain and the manner in which the same shall be collected, and which charges shall be regulated in such manner as will, in the judgment of the Secretary of Agriculture, produce sufficient revenue only to meet the necessary expenses of the inspection service, said fees to be covered into the Treasury of the United States as miscellaneous receipts, in the same manner as for other miscellaneous receipts.

Sec. 10. That no inspector or deputy inspector of grain shall, during his term of service, be interested, directly or indirectly, in the handling, storing, shipping, purchasing, or selling of grain, nor shall he be in the employment of any person or corporation interested in the handling, storing, shipping, purchasing, or selling of grain.

Sec. 11. That any person interested in any consignment of grain inspected under the provisions of this Act may appeal from an inspection made by any assistant inspector to the chief inspector at the point where such grain is inspected, and from said chief inspector to the Secretary of Agriculture. Said Secretary shall make all needful rules and regulations to govern appeals.

Sec. 12. That when any grain which, having been inspected and certificate of inspection issued hereunder, is mixed with any other grain not inspected, or with grain which has been inspected and certified at a different grade, the same shall not be shipped out of the state where such mixing is done without being reinspected and graded; any such person or corporation shipping such grain as aforesaid without reinspection shall be deemed guilty of a misdemeanor.

Sec. 13. That the shipment or consignment of any grain aforesaid from any of the places mentioned herein to another state or foreign country without the same being inspected and graded as herein provided is hereby prohibited; but where grain has been once inspected hereunder, and remains unmixed with other grain, the same need not be reinspected at the place from which it is exported: Provided, however, That said Secretary may in his discretion reinspect any cargo of such grain before the same is exported.

Sec. 14. That it shall be the duty of the inspectors and assistants to investigate the handling and weighing of grain inspected by them, and to make such report thereon as the said Secretary may require; and it shall be the duty of every person or corporation weighing such grain to allow inspection of such weighing and handling by said inspectors.

Sec. 15. That any person or corporation who wilfully does any act prohibited herein or who wilfully refuses or neglects to do or perform the things required of him under the provisions of this Act, shall be deemed guilty of a misdemeanor, and upon conviction thereof shall be punished by a fine in a sum not to exceed five thousand dollars, or by imprisonment not to exceed one year, or by both fine and imprisonment.

Sec. 16. That for salaries and for all other expenses in the city of Washington or elsewhere deemed necessary by the Secretary of Agriculture to carry out the provisions of this Act there is hereby appropriated, out of any money in the Treasury not otherwise appropriated, eight hundred and fifty thousand dollars.

Sec. 17. That this Act shall take effect and be in force from and after the first day of January, nineteen hundred and nine.

THE PRESIDENT'S ENDORSEMENT.

The general proposition of the bill is endorsed by President Roosevelt, who, in his Message to Congress on December 3, made the following recommendation:

The grain producing industry of the country, one of the most important in the United States, deserves special consideration at the hands of the Congress. Our grain is sold almost exclusively by grades. To secure satisfactory results in our home markets and to facilitate our trade abroad, these grades should approximate the highest degree of

uniformity and certainty. The present diverse methods of inspection and grading throughout the country, under different laws and boards, result in confusion and lack of uniformity, destroying that confidence which is necessary for healthful trade. Complaints against the present methods have continued for years and they are growing in volume and intensity, not only in this country but abroad. I therefore suggest to the Congress the advisability of a national system of inspection and grading of grain entering into interstate and foreign commerce as a remedy for the present evils.

PRESS COMMENT.

New York Evening Post's Washington correspondent, among other things, on November 23 said:

Federal grain inspection is not entirely new as a legislative proposition. It had considerable prominence in the halls of legislation long before it was thought desirable to invoke Federal aid to regulate swollen fortunes, meat inspection, purity in food, corporations, engaged in interstate business, and kindred subjects. Jeremiah M. Rusk of Wisconsin, the first Secretary of Agriculture, recommended a national standard of grain in his annual report of 1892. In that year a grain inspection bill passed the United States Senate, Senator Sherman of Ohio being in charge of the legislation. The bill was favorably reported in the House, but did not pass. For the last five years Senator McCumber has had a grain inspection bill in the Senate. It is said that the Department of Agriculture has not been in accord with the details of the McCumber program in the past, but that the bill to be proposed this year will have the approval of Secretary Wilson.

When the grain inspection measure is taken up by the Committee on Agriculture Senator McCumber will appear to make an argument in its favor. He is now collecting data for this purpose. He says he will be prepared to show that unless the United States intervenes and fixes and enforces a standard of inspection in this country it is in danger of losing a large part of its grain trade abroad. He has fortified himself with letters from our consular officers as to conditions in the leading grain centers of Europe, who, he says, report that foreign buyers are now seeking grain from Russia, South America and Rumania in preference to American grain.

The Boston Financial News of November 13 among other things said (editorially):

Some government officials, hearing that foreign purchasers of our grain find fault with the character of the inspection, have started an agitation for government inspection and grading of grain. At present the inspection is done almost wholly by commercial bodies of acknowledged standing. It may be that the inspection has not been altogether perfect, but we do not consider that the criticisms of consumers in England and the Continent are proof. We recall recent official criticism of German guarantees of invoice of goods shipped to this country as evidence that even across the water all is not perfection.

Granting that the inspection of grain is open to criticism, if the foreign purchasers are aware of the fact they can make due allowance for it. They are not forced to pay unwarranted prices. Purchasers of grain in the East do not accept the grading of the Western inspectors when it differs from their own.

We see no more reason why the federal government should embark in the work of grain inspection than why it should inspect and guarantee butter, eggs, breakfast food or hardware. Why not have an army of inspectors employed by the government at wages much above any they could earn elsewhere to cover the country and stamp the product of all the hens as fast as laid? If every egg was stamped with the official statement that it was fresh on a given date how much the housewives of the country would be saved. The fact that the cost of such inspection, to be paid in taxes by all the householders, would amount to many times the value of the eggs that otherwise would be thrown away because worthless, is, of course, of no practical consequence compared with the advantages of inspection and the government jobs.

Why the government should pick out the grain industry as one to be supervised and regulated, rather than any one of a thousand others, it is impossible to say. Nobody attempts to offer any explanation except that the foreigners object to the present inspection. That seems to be sufficient cause at present for any action by this government.

The incentive for action appears to come in large measure also from the farmers, who seem to feel that the government inspection would be

more favorable to themselves. It is not unprecedented that both the growers and the buyers should feel themselves injured by the present system.

Illinois has a grain inspection system which is said to be absolutely worthless for all practical purposes. Its grades are not accepted by grain exporters, who hire their own inspectors. The government could not enforce its own grading. It is not a question of the purity of the product. That can be ascertained and certified to definitely. The fact that a government inspector says that a certain car of wheat, in his opinion, is No. 1, and another No. 2, will not lead the purchaser to accept the wheat if in his opinion the grading is faulty.

It is time to call a halt on government regulation, inspection and certification. It is well to retain a few things in which the public can exercise its own judgment. If the government inspection cannot be forced upon the public it is worthless, and it seems to us preposterous that any man should be forced to pay the price of No. 1 wheat for a car which a government inspector has so tagged, even though its quality may be entirely unsatisfactory.

The New York Journal of Commerce, among other things, previous to the appearance of the Message, said:

Grain men here did not undergo a change of opinion when the news came from Washington that Senator McCumber of North Dakota had secured the endorsement of President Roosevelt and the Department of Agriculture for his bill providing for Federal grading and inspection of grain, which failed of passage at the last session of Congress after having been opposed by practically every commercial organization of standing in the United States.

Grain merchants are unreservedly in favor of a more rigid system of grading and inspection—it would save them a very large sum of money; but they are full of reasons why the desired state of affairs could not be brought about through the work of a bureau attached to the Department of Agriculture.

The first and most potent of these reasons, they say, is to be found in the absolute failure of the Illinois state system, which has been in force long enough to prove its utter worthlessness. This question was put to five leading grain exporters of this city: "Do you buy grain in Chicago according to the grading of the state inspectors?" The answer was the same in each case: "No; we pay no attention to it further than to meet the cost. We are forced to employ inspectors of our own in order to secure reliable and acceptable grading."

Members of the New York Produce Exchange, who as a body last year characterized the McCumber bill as an absurd and foolish piece of legislation calculated to do great injury, declared that they now were in opposition more strongly than ever, and in possession of irrefutable arguments which, when properly presented, should cause the President to change his mind. A representative of one of the large cash grain houses of Chicago and New York said:

"It seems to me that the government just now is saddled with about all the work of supervision it can take care of. Lately I have heard that it could not secure capable men to act as bank examiners and food inspectors. These inspections are necessary to prevent crime and protect the public, but such is not the case in the matter of grain, unless you place the boards of trade and commercial exchanges in the criminal class."

Mr. Henry B. Hebert, several times president of the Produce Exchange, said: "Federal grading and inspection of grain could not possibly prove advantageous; instead of solving the problem it would simply result in a further complication. Such a system would be very apt to fall into a political office and under the control of politicians."

Exporters are firmly of the opinion that Government grading and inspection would not result in the maintaining of standards throughout the West. This opinion is created not so much by lack of confidence in the work of Government bureaus as by full and complete knowledge of trade conditions. When asked for a remedy, the local grain men merely point to the rules of the New York Produce Exchange, under the operation of which grading and inspection has proved satisfactory to buyers of all countries.

The Price Current of Cincinnati, C. B. Murray, editor, on December 5 said:

Uniformity as far as can be reached in classification of grain entering trade channels, and in methods of inspection as to determining the

grades and condition of such grain, are matters of great importance in both domestic and foreign traffic in such products. The grain interests of the country have taken action upon these questions, and good progress has been made in adoption of uniform rules by the various exchanges.

In his annual report Secretary Wilson of the Department of Agriculture says of the need of uniformity in inspecting and grading of grain:

"It becomes more and more evident as this work progresses that some uniform system of inspecting and grading grain is absolutely imperative. Our producers of grain suffer through the lack of uniformity in grading, and our markets abroad are injured by lack of confidence in the grades established. It is believed that the end to be attained is through national inspection of all grain entering into interstate and foreign commerce, and the attention of Congress is respectfully called to this important question."

A very large part of marketed grain does not enter into interstate or foreign commerce, and it does not appear that the interests concerned entertain the view that governmental control of these matters is desirable, or that a condition of efficiency and effectiveness in the direction of securing uniformity of methods and regulations applicable to all the business affected can be expected under governmental management equal to the regulations and co-operation of the commercial exchanges. Secretary Wilson's report says:

"Attention was called in my last report to the unsatisfactory methods of handling and grading grain now in vogue. The laboratories established at Baltimore and New Orleans have continued to receive the cordial co-operation of all interested in the handling of grain and have determined some of the more important factors entering into the question of standardizing present methods and grades."

"The moisture-testing apparatus introduced last year by the Department has been used with great success in these laboratories. This apparatus has been adopted by many commercial organizations, and they report that it has been of the greatest value to them in determining the moisture content of grain. This apparatus enables us to determine the moisture quickly and accurately, making it entirely practicable for use under commercial conditions."

"Additional laboratories have been established at Duluth, Minneapolis, St. Louis and New York. At Duluth and Minneapolis special attention is to be given to finding the best method of accurately determining and measuring dockage. Through the work of these laboratories and the general investigation of grain-trade conditions the Department is coming into possession of much valuable information which should enable it to be of great assistance in straightening out the unsatisfactory conditions now existing."

The Boston Transcript, of December 5, considers uniform inspection not easy, but says:

Grain men of this city are generally much pleased at the recommendation in President Roosevelt's message for a national system of inspection and grading of grain entering into interstate or foreign commerce. They regard it as a long step in the right direction. That the problem of establishing such a system is a matter of some difficulty, however, is explained by George E. Reed, a well-known grain exporter of the Chamber of Commerce, who said, when asked about the matter to-day:

"While it seems comparatively easy to arrive at a basis of uniformity on spring wheats, rye, barley, oats and other small grains, yet when we come to winter wheats, which are raised in such widely separated areas, and in such a variety of environments, and in the case of the grading of corn for export at the seaboard, through ports in latitudes many hundreds of miles apart, where the temperatures border at times on the extremes of arctic and tropical conditions, we encounter problems with which we are still wrestling."

"In the germinating season, who would like to say that corn originating from Illinois common points and intended for Liverpool, should be graded uniformly at, we will say, Galveston and New York, for instance, where, in the case of the Southern port, it might arrive in summer weather, be loaded into the ship, and then remain there several weeks waiting for other cargo, in their slow steamers, with a distance to Liverpool many hundreds of miles longer than the distance to Liverpool from New York; whereas the same corn might arrive in New York in cold freezing weather, be loaded into ships that are not in port over three or four days and make the voyage to Liverpool in a week—the corn on the one hand passing through the extremes of heat,

and on the other through the greatest degree of favorable temperatures.

"It is difficult for one not having residence in the United States to get a clear understanding of local and state conditions, as related to our country as a whole. Each port having a standard, different in some degree from its neighbor, has led to some confusion in the minds of the foreign buyers as to the actual conditions prevailing here. The foreigner naturally looks for things American to be typical and homogeneous, and cannot understand how the same grain could grade one way at one port and something else at another, and is quite likely to charge to chicanery and fraud inspection which supported by its local rules would be quite justifiable."

"There have been complaints from abroad of the quality of American grain, and the seaboard exporter has had his full share of trouble in standing between the seller of Western grain, on the one hand, and the receiver on the other side of the water. He is fully aware that conditions as regards the grading of grain are in no way perfect, and readily welcomes a conservative movement toward a betterment of conditions. Most American exporters are willing to join the producer and handler in a fair and impartial consideration of the whole matter, but much ill-advised action has been taken in this movement which has tended to make some indifferent to any change."

"Some exporters express themselves as of the opinion that, while the Western uniform grading of grain might be practicable, they believe that each seaboard port will for some time to come have to grade according to its local conditions. Possibly a solution of the problem might be: First, standardization of inspection, with allowance for special grades to cover local conditions; second, a division into Western and seaboard departments; third, a board for purposes of appeal, one member of which might be a representative of the agricultural department for scientific advice."

The subject does not seem to awaken much interest in Duluth, if the following from the Duluth Star correctly reflects public opinion there:

"There is no feeling here, I believe, against Federal inspection of grain. But traders and shippers here are perfectly satisfied with the Minnesota inspection. Speaking entirely for myself, I feel that the Federal inspection would give uniformity and probably would carry greater weight with foreign buyers."—J. H. Barnes, president of Duluth Board of Trade, and extensive grain shipper.

While the feeling of members of the local Board of Trade and buyers and shippers in Duluth in general is neutral toward the national grain inspection scheme of President Roosevelt, the grain raisers, as represented by M. O. Hall of Mohall, N. D., are heartily in favor of the president's scheme. "National inspection would cure every complaint that the grain raiser of the Northwest is making against state inspection," said Mr. Hall. "There would be no more troublesome quarrels between Minnesota and Wisconsin inspection, and the grain raiser would be always sure of getting a square deal. The president looked to North Dakota and Northwest sentiment when he made this recommendation to Congress."

Minneapolis appears to be opposed to Federal inspection. At any rate the Minneapolis Tribune has said:

Minneapolis grain men are opposed to the McCumber Federal inspection bill, for the reason that it will prove conflicting and that an added expense will result.

This bill is being generally discussed among the grain men at the Chamber of Commerce, and there is much interest in the project of holding a third Uniform Grade Congress to take the matter up. Letters have been received from the Toledo Produce Exchange on the question of calling this Congress at once.

It is believed by the grain men that this Congress may result in the establishment of such uniformity of action as would obviate the necessity of Federal inspection. The question will be considered at the coming meeting of the directors of the Chamber of Commerce.

Since the McCumber bill has the approval of the President it is deemed expedient by the grain men to take action at once, and the Minneapolis Chamber of Commerce men will be in the fore on this movement.

The difficulty with the Federal grain inspection, according to some of the grain men, consists in the fact that it applies to interstate business, which would result in having two systems of inspections and two sets of officers and inspectors. This, they say, would mean that there

would be confusion between the Federal and state inspections.

The Federal inspection law, as outlined, will also provide that the system be self-sustaining, a bad feature, according to the grain men, as they would be charged with the double expense of supporting two grain inspections where one would answer the purpose.

The Toledo News-Bee on November 17, among other things, said:

"Senator McCumber made an effort to have a similar bill passed at the last session of the Senate, but it failed of passage," said Frank I. King, after reading the North Dakota senator's new bill. "It is simply an effort to place the inspection of grains in this country in politics. They have state inspection in some places now. In Chicago, for instance, the inspection is under the jurisdiction of a city Board of Warehouse Commissioners. Political inspection there has not proven popular with the trade, and it has been the cause of a lot of complaints. However, it is better regulated now.

"There always have been and always will be some complaints on the inspection of grains. There is a difference in grades established by the different inspection departments. For instance, the seaboard inspection is what we term 'easier' than our inspection. However, our inspection is popular throughout the trade now and we have the most capable men in the business. The effort to bring about political inspection is opposed by the entire grain trade. The Grain Dealers' National Association, which has its headquarters in Toledo, is opposed to it. The inspectors, themselves, are opposed to it. 'Big Chief' Culver, Toledo board's chief grain inspector and the president of the Grain Inspectors' Association of the United States, also is opposed to it. There has been some complaint from abroad on our grading and that probably explains President Roosevelt's interest in the matter," concluded Mr. King.

Its Washington correspondent on November 27 sent out to the St. Paul Dispatch the following, among other things:

One of the hottest congressional fights which will be participated in in the 60th Congress will occur over the proposed Federal inspection of wheat at terminal points. During the 58th Congress Senator McCumber made a vigorous attack on the state inspection of grain in Minnesota, and in the 59th Congress he repeated and amplified his statements. Senators Nelson and Clapp took issue with the North Dakota federalist, and after a heated debate the matter was allowed to rest. But Senator McCumber persisted until he secured the adoption of a [thought it was the La Follette] resolution by the Senate instructing the Interstate Commerce Commission to prosecute an inquiry into the relations, ownership and operation of the elevators in buying, selling and shipping of grain, and what connection, if any, such elevators had with owners or lessees of railroads.

That there will be opposition to the McCumber bill is clearly apparent from the concurrent resolution of the Minnesota state legislature at its last session. In that resolution, which was approved March 6, 1907, the state legislature takes issue with the North Dakota legislature, which passed resolutions containing charges against the Minnesota grain inspection. Copies of this and Minnesota's concurrent resolution were sent to the senators and representatives in Congress from the Northwest, and attached to the official document was an exhibit showing how grain in the Northwest is handled under state inspection.

When Senator Nelson was governor he recommended and took active part in state grain inspection. Several measures were under consideration, and the legislature which passed the bill being composed largely of farmers, Senator Nelson called them in and had several conferences with them. Many of their views were embodied in the bill before it was passed.

If President Roosevelt recommends Federal grain inspection it will give the measure a great deal of prestige, but at the same time he cannot count on the support of Minnesota and Iowa.

Senator La Follette may advocate federal inspection. Even if a bill passed the senate its chances of ever getting through the house are very remote.

The Nashville, Tenn., Banner on November 30 concludes a descriptive article on the bill by saying:

Although made to apply particularly to western states, which form the chief grain-growing section of the Union, the proposed law would naturally have the effect of fixing the prices of grains everywhere. It is also another step in the direction of multiplying the number of Fed-

eral officeholders and the centralization of power at Washington. The aim may be all right, but there is bound to be considerable objection to a further extension of the system of government by inspection.

TRADE ORGANIZATIONS.

The following preamble and resolution were adopted by the board of directors of the Chicago Board of Trade, at its meeting held on December 3, 1907:

Whereas, It is currently reported that a bill for the enactment of legislation for the purpose of establishing a uniform inspection of grain throughout the country under Federal control will be introduced in the LX Congress by Senator McCumber, and also a bill of the same character by Congressman Watson of Indiana; and,

Whereas, Uniformity in rules governing the inspection of grain throughout the United States might be desirable and offer many attractive and apparently just and correct features from an academic standpoint, but which a long and wide experience and an unprejudiced judgment have proven wholly impracticable, for the following reasons:

First: That there are great variations in climatic conditions in different markets, which are centers of distribution for domestic consumption and for export.

Second: There are various widely differing varieties of the same kinds of grain produced in different sections of this country, and the distinct differences in quality and actual merit in the same variety of grain produced, varying from the extreme north to the Gulf.

Third: That the construction and application of any uniform rules necessarily depend upon the judgment of the inspectors who may be appointed under this act, and that equality of construction and judgment are conceded to be practically impossible.

Fourth: That much of the dissatisfaction and irregularity arising from the handling of grain at distributing centers and at consuming points in this country and abroad is brought about largely from the marketing of immature, unseasoned ill-conditioned and unclean grain; therefore,

Resolved, That this association is opposed to the proposed legislation, because the handling and inspection of grain under such a Federal law would be cumbersome and impracticable, and would prove to be inefficient in its actual workings and would be more likely to cause losses arising from the greater delays in the handling of grain than is experienced under the present systems, and, further, would entail increased charges without proper compensating benefits, and, therefore, would be an additional tax on the producer.

On December 7 Secretary Dorsey of Texas addressed a letter on this subject to the members of his Association, in which, among other things, he says:

I am just in receipt of a letter from Mr. J. F. Courcier, Secretary of the Grain Dealers' National Association, which will doubtless interest you, as it touches on a subject that may affect your business for many years, as it is proposed by Senator McCumber of North Dakota and President Roosevelt to have passed at the present Congress a law to govern the inspection of all grain shipped as an interstate shipment, taking the inspection away from the regular organized commercial bodies, exchanges, boards of trade, or other organizations controlling the inspection of grain; and now that the President has taken the matter up, it looks as though we will have to decide what we want, or whether or not we desire any change in the present system, and then use our influence through our organizations to prevent any change, if we do not want a change from the present system, or to use it for the proposed change, if we desire it.

I will thank each of you who feels interest in this matter to advise me as to your views, so you may be properly represented at the conference, or that we may be able to represent the views of our members.

It is claimed by some that if such a change should be made, that the inspection of grain would be done by incompetent politicians, while others claim that we would have a more efficient uniform inspection system. As we get a great deal of our grain from other states, making it interstate grain, it occurs to me you are vitally interested, and I hope you will advise.

The West End Improvement Club of Council Bluffs, Iowa, a local organization to "boom the town," which a year ago endeavored to have the state of Iowa go into the grain inspection business on the supposition that in some mysterious way it

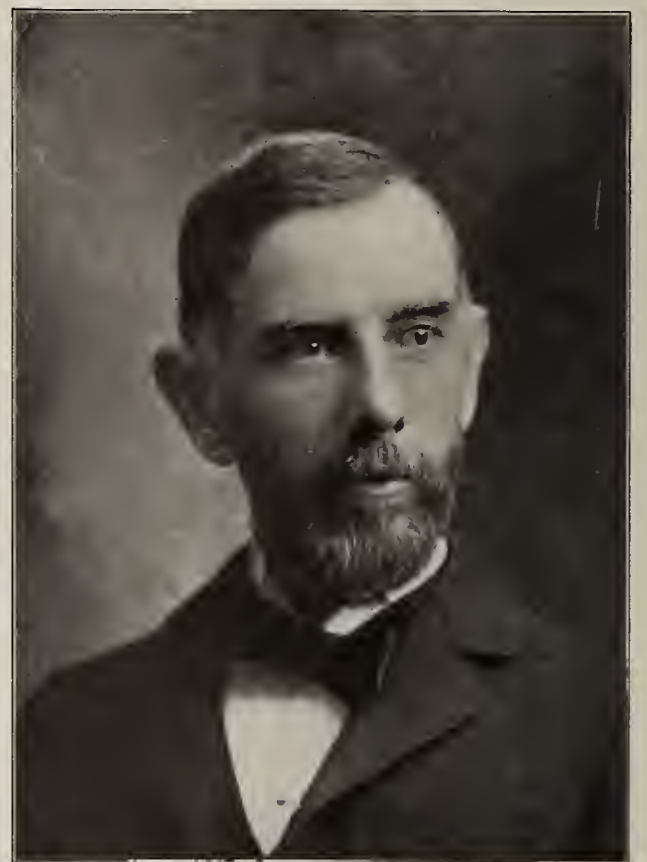
might "boom the Bluffs," on December 5 adopted the following resolution:

Whereas, President Roosevelt, in his annual message, favored federal inspection of grain in the interstate trade, and, as such inspection is conducive to the growth of large cities in the state having inspection laws, and the prosperity of the farmers and the business interests of the said state, be it

Resolved, That this Club heartily favors such a measure and requests our representative and senators in Congress to give their earnest support to the passage of this law, as recommended by the President of the United States.

DEATH OF ROBERT F. COATES.

In the untimely death of Robert F. Coates, for the past eight years engaged in the grain business under the name of the R. F. Coates Grain Co., the grain trade of Kansas has lost one of its most successful operators, while the city of Wichita additionally mourns the death of one of its most promi-



THE LATE ROBERT F. COATES.

neut and influential residents. Mr. Coates was but in his fifty-second year when on December 1 he succumbed to congestion of the bowels. For several weeks he had been in a precarious condition and could take nothing but liquid nourishment. However, he attended to his business at his office until the day following Thanksgiving Day, when his condition became more acute.

Mr. Coates was born on a farm in Lycoming County, Pennsylvania, on February 22, 1856. He was raised as a farmers' boy, and after attaining his primary education he went to Millersville to be educated at the Pennsylvania State Normal School. By teaching country schools in winter and private classes in the summer he finished his schooling and then went west to Wichita, Kan., where he arrived in 1886. He found Wichita in the midst of her boom and at once became a dealer in dirt. He worked for success and got it, but retired from the field to become receiver of public moneys at the Wichita land office.

Mr. Coates first became connected with the grain business in 1896, when he was bookkeeper and shipping clerk for the Galveston Export Commission Co., with which firm he remained until its failure in June, 1897. He immediately went to the W. S. Mitchell Grain Co. and represented them in the Missouri Pacific Territory until the spring of 1898, when he accepted an offer from the J. H. Teasdale Commission Co. of St. Louis to represent it in the same field. Subsequently he engaged in

business for himself, meeting with the success which he deserved.

He was much thought of in his own community, exercising much influence over politics in his capacity as a private citizen. Frequent articles on city government were indicted by him for the local press, for no man was better versed on these subjects than was Mr. Coates.

His wife was Miss Anna B. McKinley of Wichita. She and a son and a daughter survive Mr. Coates.

BULK GRAIN HANDLER.

The grain dealer or miller who receives large quantities of grain in bulk from wagons, and whose situation is such that he cannot use an automatic wagon dump, will be interested in the accompany-



A SUCCESSFUL BULK GRAIN HANDLER.

ing photograph of a very successful machine employed by the Farmers' Feed Co. of New York City.

It consists, as shown, of an ordinary bucket elevator suspended from a gallows-frame in such a manner that it can be raised or lowered and swung outward to any position required. It is about eighteen feet long between centers of head and foot wheels, and is fully encased except at the lower end, where the buckets engage the grain. The elevator delivers into a system of screw conveyors, which distribute the grain to the various bins inside the building. The entire action being automatic, practically the only expense attached to the work is the salary of one attendant and about two horsepower consumed in operation. The buckets are 14x7 inches in size and have an elevating capacity of 1,800 bushels per hour, at a speed of 200 feet per minute.

Modifications of this outfit can be used to great advantage in loading cars from wagons or in handling any loose granular material which will readily yield to the dredging action of the buckets. The equipment was designed and built by the Jeffrey Mfg. Co. of Columbus, Ohio, who manufacture elevating and conveying machinery of all kinds. The cost of maintenance is small and the labor saved will ordinarily pay for the machinery in a few months.

After a prolonged period of excellent weather for drying out the crop, new corn is at last finding its way to market. But such corn! All that has been said about the poor quality of this crop is more than confirmed by the grading of present arrivals. It's no wonder farmers are anxious to sell the stuff. It is scarcely fit for feeding purposes, and if cribbed the greater part would soon

get out of condition and be wholly worthless. The only thing they can do is to ship it to market, for not until it has been treated to a generous application of the kiln-drying process will the bulk of it be usable.—E. M. Wagner, December 7.

BROOMCORN GROWING.

The broomcorn crop of the country is grown mainly in Oklahoma, Kansas and Illinois, while lesser lots come from New York, Missouri, Tennessee and Arkansas. Oklahoma is the heaviest producer, with central Illinois a near competitor in quantity, but surpassing all the states in quality. Oklahoma's crop will yield 25,000,000 brooms, valued at 15 to 20 cents each, while Illinois will yield 15,000,000 to 20,000,000, valued at 25 to 40 cents each. Kansas brush is made into whisk brooms, or brushes—enough to supply the entire United States.

Broomcorn requires about the same conditions of climate and soil as common maize and is, like it, planted either in hills or in drills. The rows may be from two to four feet apart. There is no skilled work required in its cultivation, but the harvest must be at just the right time. In harvesting the beautiful plume is cut from the stalk within a few inches of where the fiber or straw begins. The stalk may be used for fodder, being about the same quality as that of Indian corn. The brush is first dried for about one month, then comes the thrashing process, consisting of running the brushes through a machine that crushes off the seed. After the thrashed brush is seasoned in the sheds, it is packed into bales, weighing about 800 pounds, and shipped to the factories.

Owing to the necessity for harvesting the corn exactly when it is ripe, there is an urgent demand for "broomcorn canaries," as the harvest hands are known. These men are usually tourists and men of erratic habits and disposition. They are difficult to control and their employment is the most annoying feature of raising the crop. They have been demanding more pay with each year, and instead of the old price of \$1 per day and board, they now demand \$2 per day and board, and get it; but it is hoped that eventually the harvesting will be done by machinery. The man who would invent a broomcorn harvesting machine that would do the work satisfactorily would make a fortune.

Reports to the Orange Judd Farmer say that "the acreage in Illinois this year is materially larger than last year, with a rate of yield practically the same as in 1906. The season was not entirely favorable for the crop, especially at time of harvest, there being too much cloudy and wet weather. So well, however, are the growers of Illinois prepared to handle their crop, and so experienced are they in its manipulation, that in spite of a season that was not good, the general quality of the crop is excellent.

"The price of brush does not vary greatly from that received by growers from the crop of 1906. In Oklahoma, however, thanks to the better quality of the crop, on account of extra care in its handling, the price is quite a little better than it was last year. In Illinois, growers as a rule are holding their broom corn at about \$100 a ton, and at this price or a shade under the crop has moved with moderate rapidity. In Kansas, on the other hand, the crop is moving very slowly at prices ranging from \$50 to \$70. In Oklahoma reports upon prices are very uniform in character, ranging between \$60 to \$65, as against \$45 last year at this time.

"The following shows the estimated acreage and production of broom corn by states for 1907 and 1906:

BROOM CORN CROP, 1907 AND 1906.						
	1907.			1906.		
	Acres.	Per Acre.	*Lbs.	Acres.	Per Acre.	*Lbs.
Illinois.....	23,000	550	12,650	20,000	550	11,000
Kansas.....	27,200	425	11,560	25,000	500	12,500
Nebraska.....	2,200	300	660	4,500	300	1,350
Oklahoma.....	47,200	475	22,420	45,000	500	22,500
Other.....	1,000	300	300	1,200	325	390

*In round thousands, last 000 omitted."

ONE OF THE VICTIMS.

Geo. E. Thompson, assistant to R. E. McKee, agent, and rate clerk, at Columbus, Ohio, for the B. & O. Railroad, is in jail under indictment for embezzlement, as noted on page 253 of the November number, where his plan of operations is explained in detail. Among others, on August 14 there were shipped by McCord & Kelly of Columbus four cars of wheat with bills of lading to E. W. Bassett at Newport News for export. After issuing bills of lading in proper manner, Thompson diverted the grain to H. M. Strauss and Abel Bros. of Cleveland, requesting that they send him the money therefor by express to Columbus, which they did. He then absconded, but was caught by the B. & O. Railroad in Minnesota, and is now in jail awaiting trial.

WEDGES DO NOT STOP LEAKS.

More grain cannot be taken out of a car at destination than has been loaded in by the shipper at starting point. That is a self-evident truth. Nor can as much grain be taken from the car at destination as has been loaded into it by the shipper if the car springs a leak in transit. "That is a cinch." Every shipper should therefore go over a car painstakingly and see that it is in as good condition as possible before loading it.

The picture shows an old-style car, many of which are still seen everywhere, but more especially on the Pennsylvania Railroad. The trouble with this car is that there is no sub-sill to which to nail the sheathings, and consequently many shippers try to solve the difficulty by driving wedges between the end sill and the end sheath-



A LEAK AT THE END SHEATHINGS.

ings. This only postpones the trouble; for when the car is in motion the strain and vibration soon work the wedges loose and start a leak again.

The best way to stop a leak caused by loose end sheathings is to take a piece of muslin, or lining of some sort, and stuff it between the end sheathings and the end sill. This method is an effective one. The best method, however, is the use of a lining protection on the inside of the car or to see that it is properly coopered and lined, if necessary, before loading.

The first car of new No. 2 yellow corn was received at Chicago on December 5. It was received over the Wabash and was bought by the Quaker Oats Company at 58½ cents. Last year the first car of new No. 2 yellow was received nearly a month earlier in the season.

RAILROAD CLAIMS.

"Our experience in handling 'Railroad Claims' for members has demonstrated the following facts," says Secretary Wells, of the Iowa Grain Dealers' Association:

- (1) That many claims are presented to railroad companies that are not made up in good form and do not have proper papers attached as evidence.
- (2) That claimants do not always present claims with a clear understanding of their legal rights.

The officers of the Iowa Grain Dealers' Association therefore submit the following joint plan of handling "Railroad Claims" by the members who desire to do so, through the secretary of this Association, viz.:

- (1) That the Association keep on hand a stock of blank forms to supply the members in order to establish uniformity in the manner of making claims as follows, viz.:

Form A, loss of weight in transit. (See copy below.)

Form B, loss in market value because of delay in transit.

Form C, loss in quality because of delay in transit.

Form D, loss in market value because of delay in furnishing cars.

(These blanks will be mailed to members on request.)

- (2) That the member made up the claim (with the assistance of the secretary if desired) and forward by registered mail direct to the general claim agent, keeping on file copy of the statement of claim and also postal receipt. Write the claim agent every fifteen days urging attention. If no results at the end of 90 days, request that the papers be returned.

- (3) Send the papers thus returned to the secretary of the Association, and if considered advisable, he will present the claim to the claim agent again in same manner as was done by the member.

- (4) If the claim is still refused and it is considered as having merit, place the same in the hands of an attorney selected by the Association, thus concentrating all questions that arise and economize in cost of attorney's fees.

- (5) If the claim involves a general legal question of interest to the members, to submit the matter to the membership and, if desired, to proceed by an action in court to secure a legal decision.

Copy of blank for claim of loss in transit:

RAILROAD CLAIM.

Loss of Weight
in Transit Shippers Claim No.
 Railroad Claim No.
 190..

..... Railway Company.
To.....

.....Dr.
To loss in transit of.....lbs. of....., less
one-fourth of one per cent allowed for shrinkage
.....lbs.

.....bushels at.....cts per bushel \$....
Less freight at.....cts per cwt. \$....
Amount of claim \$....

Car No....., Initial....., shipped from (station)
....., (Date).....190.., to
(station)..... Via.....Railway
at

Amount loaded into car.....lbs
Amount delivered by carrier.....lbs
Shortagelbs

The following papers are attached hereto, viz.:

1. Copy of Bill of Lading.
2. Affidavit of Weight by Loader.
3. Certificate of Weighmaster at Destination.
4. Account of Sales.
5.
6.

Kindly give this claim your immediate attention.
If payment is refused, please return all papers attached promptly.

Yours truly,
Addressed to (Signed).....
 (Address).....

SUPERIOR SALVAGE.

The salvage grain of the great Superior elevator fire was sold to a Milwaukee firm for \$22,000. There was some question of the amount of duty to be paid on the bonded grain included in the salvage, but this curious problem was settled readily, the Government agreeing to release the bonded grain subject to the payment of a nominal duty, probably based on the proportion of the salvage to the original amount stored.

The work of sorting and loading the grain began

promptly, and it was found that many thousand bushels of the grain would be uninjured even by water, coming out of the heap without even a taint of smoke. In other portions of the ruins some was badly soaked and in still other portions it was scorched and even burned. All of the latter was shoveled to one side, but the scorched and the damp piles were loaded out by the Northern Grain & Stock Company of Manitowoc, to whom the salvage purchasers sold it.

DEATH OF E. B. BALDWIN.

The death of Erastus Bostwick Baldwin, one of the oldest members of the Chicago Board of Trade, occurred on the morning of November 30, at his home, 500 W. Congress Street, Chicago.

Mr. Baldwin was born at Hinesburg, Vt., in 1827, and came to Chicago in 1863, taking out a membership in the Chicago Board of Trade in that year. The firm name was Baldwin & Stone, and on its dissolution about four years ago, Mr. Baldwin associated himself with Crighton & Co. and was actively engaged in business up to the time of his



THE LATE E. B. BALDWIN.

death. He was on 'change on the Friday preceding his death, which occurred from heart failure the following morning.

Mr. Baldwin was a man of the type of the old-fashioned Down-East Yankee—shrewd in business, but of unimpeachable honor and integrity; and his opinion on business matters was much sought after by his intimates. He was very active in business up to the very last, and yet he was, with possibly one or two exceptions, the oldest living member of the Chicago Board of Trade.

COMMITTEES G. D. N. A.

Following is a list of the committee appointments made by President Reynolds of the Grain Dealers' National Association for the current year:

Executive Committee—J. W. McCord, chairman, Columbus, O.; Arthur R. Sawers, Chicago; T. A. Morrisson, Kokomo, Ind.; A. E. Reynolds, Crawfordsville, Ind.; John F. Courcier, Toledo, O.

Committee on Arbitration—Fred Mayer, chairman, Toledo; C. C. Miles, Peoria; E. M. Wasmuth, Roanoke, Ind.

Committee on Trade Rules—E. A. Grubbs, chairman, Greenville, O.; S. W. Strong, Pontiac, Ill.; J. M. Brafford, Indianapolis; Joseph Gregg, Sr., Atlanta; J. A. A. Geidel, Pittsburg.

Committee on Membership—Fred D. Austin, chairman, Chicago; Geo. F. Powell, St. Louis; W. F. Rubins, New York; H. M. Stratton, Milwaukee; P. E. Goodrich, Winchester, Ind.

Committee on Legislation—P. E. Goodrich, chairman, Winchester, Ind.; H. H. Bingham, Louisville, Ky.; S. S. Tanner, Minier, Ill.; W. Leroy Snyder, Baltimore; C. B. Jenkins, Marion, O.

Committee on Transportation—C. S. Bash, chairman, Ft. Wayne, Ind.; W. E. Shelden, Jack-

son, Mich.; A. F. Leonhardt, New Orleans; Geo. H. Hubbard, Mt. Pulaski, Ill.; Grant McMorran, St. Paris, O.

Committee on Crop Reports—H. S. Grimes, chairman, Portsmouth, O.; B. A. Lockwood, Des Moines, Ia.; Bennett Taylor, Lafayette, Ind.

Committee on Demurrage—Chas. B. Riley, chairman, Indianapolis; E. M. Wayne, Delavan, Ill.; E. L. Rogers, Philadelphia.

Hay and Grain Joint Committee—J. W. McCord, chairman, Columbus; Arthur R. Sawers, Chicago; T. A. Morrisson, Kokomo, Ind.

Joint Committee of Grain and Feed Dealers, Representing the G. D. N. A.—M. F. Baringer, chairman, Philadelphia; H. E. Halliday, Cairo, Ill.; John W. Cox, Boston. Representing the Feed Trade—C. B. Pierce, Milwaukee; E. C. Dreyer, St. Louis; Robert W. Chapin, Buffalo.

Committee on Uniform Confirmation Blanks—John M. Dennis, chairman, Baltimore; Fred W. Rundell, Toledo, O.; R. R. Kornegay, Selma, Ala.; Caswell E. Rose, Nashville, Tenn.; E. W. Seeds, Columbus, O.; W. L. Shellabarger, Decatur, Ill.; J. S. McClellan, St. Louis; L. W. Forhell, New York; Herman Mueller, Chicago; Alvin H. Poehler, Minneapolis; Geo. C. Wood, Windfall, Ind.

"AND THE CAT CAME BACK."

This particular cat, through a long line of ancestors, came, by direct descent, from the sacred cats of Egypt. Its ancestors were of the royal family of cats, whose sole office it was to honor with their presence the holy tomb of Isis. All the noble blood, all the sacred traditions of this family of cats were transmitted to and are embodied in this glorious Tommy, who in an unguarded moment got locked in a car of wheat en route from Idaho to Chicago. This particular car was shipped from the ranch of B. C. Sammons, cashier of the Corn Exchange National Bank, and was consigned to Gardiner B. Van Ness. No one knew what prompted this descendent of sacred cats to enter the car, but enter he did on October 29. He was locked in the car without anyone's being aware of his august presence, and was taken from the car November 26, in the yards at Chicago, to all appearance a sacred but dead cat.

But a cat doesn't have his nine lives for nothing; and it is hard to kill a descendent of the sacred cats of Isis. Tommy showed signs of life, therefore, in due course; and after eating three or four luncheons given him by the elevator helpers who had gathered round, and after drinking a couple of bucketfuls of water, he sat up in the shanty to which he had been removed and began to take notice.

Then a dreadful thing occurred. The official cat of the elevator, a large maltese, but not of the noble line of the Idaho Tommy, happened along, and dropped in to extend a friendly welcome. In an instant there was a room full of cats and shouting men who were trying to save their pet Tabitha. The air was filled with feline shrieks, horrible cries, flying fur and some English expletives. All at once the awed spectators saw a solar plexus skillfully delivered with the teeth; there was a vision of a dead cat on the floor, and a last view of the descendent of the sacred cats of Egypt—as he disappeared through an open window.

One of the section men broke the silence that ensued: "Sure, that was only wan-tinth cat, the rest ov him was wild cat." And he is still going—so far as it appears of record.

PRESERVING WHEAT.

The government of Canada is said to be studying the problem of "heating low grade wheat" so as to preserve it.

The exporters at Montreal are not greatly impressed by the information. The immediate difficulty with the handling of low grade wheat is to get it moved, owing to lack of cash.

As to "preserving" it, James Caruthers said: "Low grade wheat will keep in the winter months. The problem is whether it will keep after May so that it may be shipped in summer. After the cold weather has passed this class of wheat 'works,' owing to the moisture. The treatment of low grade

wheat is now done in one elevator at Port Arthur, but it adds considerably to the cost and is a slow process."

NATIONAL HAY ASSOCIATION.

The following committees have recently been appointed by the president to act during the ensuing year:

Arbitration—E. M. Wasmuth, Roanoke, Ind.; F. D. Voris, Neoga, Ill.; J. W. Beatty, Philadelphia, Pa.; E. A. Dillenbeck, New York City; Joseph Timmons, Kenton, Ohio.

Legislation—Col. E. L. Rogers, Philadelphia, Pa.; E. C. Forrest, Saginaw, Mich.; D. L. Lease, Waterloo, Ind.; C. A. Burks, Decatur, Ill.; Willis Bullock, Canajoharie, N. Y.

Interstate Commerce—H. S. Grimes, Portsmouth, Ohio; F. L. Young, Lansing, Mich.; J. W. Sale, Bluffton, Ind.; H. G. Morgau, Pittsburg, Pa.; B. A. Dean, Auburn, N. Y.

Terminal Facilities: Chas. Carscallen, Jersey City, N. J.; Mr. Whitcomb, of Whitcomb & Root, Cincinnati, Ohio; G. S. Blakeslee, Chicago, Ill.; R. E. Austin, Pittsburg, Pa.; Cyrus Bates, Boston, Mass.

Transportation—Geo. S. Loftus, St. Paul, Minn.; Charles England, Baltimore, Md.; A. E. Clutter, Lima, Ohio; A. A. Hanks, Jersey City, N. J.; Henry Ruttie, Carsonville, Mich.

Demurrage and Reciprocal Demurrage—C. S. Bash, Fort Wayne, Ind.; C. L. Corless, Blanchester, Ohio; Byrd Douglass, Nashville, Tenn.; C. A. Coleman, Savannah, N. Y.; W. C. Bloomingdale, Townley, N. J.

Grades—George T. McComb, Lockport, N. Y.; J. W. Ellis, Cincinnati, Ohio; J. W. Pew, Montpelier, Ohio; M. D. Frank, Reading, Mich.; E. W. Bertholf, Jersey City, N. J.

Standard Bales—A. T. Weaver, Chicago, Ill.; F. A. Slingerland, New York City; M. Clark, Ft. Recovery, Ohio; Charles Wolham, Berch River, Mich.; E. D. Rundell, Towanda, Pa.

Cipher Code—S. T. Beveridge, Richmond, Va.; J. B. Carter, Chicago, Ill.; J. B. McCreary, Watkins, N. Y.; Harry Kress, Piqua, Ohio; John R. Fangboner, Jr., Fremont, Ohio.

Quotations—W. R. Mumford, Chicago, Ill.; S. S. Anderson, Boston, Mass.; C. F. Squire, Philadelphia, Pa.; A. F. Leonhardt, New Orleans, La.; John Wade, Memphis, Tenn.

Statistics—Maurice Neizer, Monroeville, Ind.; P. J. Thompson, Plankton, Ohio; F. E. Nolin, Abion, Mich.; N. A. Fuller, New York City; J. A. Spencer, Dwight, Ill.

Joint Committee National Grain and Hay Association—Chas. J. Austin, New York City; J. A. Heath, Lenox, Mich.; J. M. Carmer, Auburn, Ind.

Committee on Arbitration and Investigation Rules: J. W. McCord, Columbus, Ohio; J. T. Clendenin, Baltimore, Md.; C. A. Caywood, Weedsport, N. Y.

THE BARLEY EPISODE.

The extraordinary prices which have been attained in the barley market this season have been a great puzzle to people who try to get at the bottom of things. The trade has learned a great deal about the occasion for the urgent demand, but fail to see clearly the legitimacy of the price. One can never bank upon what may happen, but from all accounts it appears that the farmer who disposed of his barley during the period of inflation took excellent advantage of his position as the owner of the bearded grain.

The report of the "malting trust" [American Malting Co.] was an amusing document to everybody but the stockholders. The matter which covered the gap between sales of the malt and the arrival of the raw material to the primary markets may have been fully satisfactory to the gentleman who dictated the explanation, but was more lucid as to what it didn't say than to what it purported to convey. The truth of the matter was that the American Malting Co. started out with the wrong hypothesis and a disarranged barley market followed which has been of great benefit to the grower who disposed of his grain.

There has been no great shortage in the barley crop. It is true that compared with last season, which was a bumper harvest, the outturn this year has shown considerable falling off. Yet compared with the crop average the government's estimate of the 1907 crop is above the average. That there must have been some influence at work

which was beyond normal comprehension was obvious. The fact that the pure-food laws might account for the appreciation received consideration. It is not improbable that the barley demand is to widen because of this regulation, but that it should result in such a tremendous advance certainly makes pertinent the inquiry, what was substituted for barley?

From all accounts the barley and malting trade have been having a most trying time. The only profiler of the episode has been the farmer as near as can be discovered. A great many producers received such remunerative prices at their shipping points that they are in so independent a position that neither the money stringency nor the great decline in wheat is troubling them overmuch.—Minneapolis Market-Record, November 25.

J. M. COUP.

One of the most genial travelers that belonged to the order of the "knights of the grip" was J. M. Coup, who formerly hailed from Toledo, Ohio, but who is now with the Saginaw Milling Co. of Saginaw, Mich. He was Sunny Jim with the accent on all the syllables, and when it came to throwing a smile or passing a pleasant word



J. M. COUP.

he could "hit the pike" away ahead of a long line of the followers of the cheerful Philosopher.

But Mr. Coup no longer lifts the light of his countenance upon the grain public of Ohio and the Central States, as he quit the road in September, 1906, to accept a position with the Saginaw Milling Co. as manager of their grain department, and is kept very busy at home, as the company controls one of the largest lines of elevators in the state, operating twenty-four in all, and is a large shipper of grain, hay and beans.

Mr. Coup was born September 16, 1876, at Navarre, Ohio, and moved to Mt. Vernon, Ohio, at an early age. After graduating from the high school there, he was for a few years with the Northwestern Elevator & Mill Co. of Toledo, of which his brother, C. S. Coup, is vice-president and general manager. Later he went on the road for W. A. Rundell & Co., buying and selling grain, and was with them about three years before going with his present firm.

NEW CATTLE FEED.

The mesquite of the Texas barrens produces a bean-like seed which N. R. Powell, a big cattle feeder of Pettus, is said to be experimenting with as a cattle feed. The beans are first reduced to a meal-cake, as cotton seed is prepared, the grinding developing oil similar in color and somewhat in flavor to some kinds of olive oil.

In some parts of Texas and northern Mexico, as in the far Southwest, mesquite is very plentiful and

the yield of beans is liberal, so that a considerable industry may come of the experiments.

RAILWAY COMMISSION OF WASHINGTON.

The Railway Commission of Washington thinks it has unearthed an agreement between the railways of that state and the warehousemen. Color is given the suspicion by the fact that this year the warehousemen adopted a new and peculiar form of receipt and at the same time the railroads adopted a rule not to supply cars to independent buyers unless the same were ordered through some warehouseman. Heretofore warehouse receipts given for wheat simply receipted for a certain number of sacks and bushels of grain to be delivered on surrender of the receipts and payment of charges. This year the receipt reads that the wheat was to be delivered "in the order in which cars are received."

This arrangement, on becoming known, immediately raised a protest from the owners of the grain, nor warehousemen. The railroads promptly denied their complicity, but the Commission believed the arrangement existed just the same, and the fact was finally admitted and the deal defended as right and fair. It works out, however, somewhat in this way: The independent buyers go into the field only when the market is such that there is a margin between the export price and that paid by the warehousemen. Sometimes this margin has been such that independent buyers have bid as much as five and six cents more a bushel than the warehousemen were offering. But the independent buyer could get an assignment of a receipt for delivery of the wheat only "in order in which cars are received." His competitor in buying, the warehouseman, was the only person the railroad would recognize in the ordering of cars. The independent buyer having no check as to the order in which cars were ordered and having to take the warehouseman's word for it, the warehouseman could hold him up for days at a time and delay delivery of wheat, claiming either that cars could not be secured or that such cars as did come to the warehouse were ordered by the warehouseman himself ahead of the cars for the independent buyer. The result of the arrangement is obvious.

As the Commission have no control over the form of the warehouse receipt, it has incorporated in its Rules a provision that the railroads must furnish cars to any shipper and must place these cars at the point where the shipper asks for them. The shipper's demand for the cars must be kept in a permanent record so that the Commission at any time can learn whether or not there has been discrimination in supplying cars. Under the reciprocal demurrage law the railroads will be protected amply in case cars are furnished the independent shipper and not promptly loaded, and at the same time the monopoly of the warehousemen in ordering cars will be broken.

TRI-STATE ASSOCIATION.

A meeting of the Tri-State Grain Dealers' Association was held at Sioux Falls, S. D., on November 20, to consider the financial situation as it affected the grain trade of the Northwest. Bankers were present from several cities in the neighborhood, and C. E. Dennis of the Sioux Falls Savings Bank made an address.

No action was taken, because there seemed to be nothing to do but to await the resumption of cash payments by the banks.

The SS. Aparima, loaded at Tacoma, in November, 8,000 tons of wheat, being the record cargo of wheat for that port.

The license inspector of Missouri on November 17 inspected the public scales of Springfield, finding four out of condition—one of them so much so it had to be ordered out of business.



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ADVERTISING.

This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, ILL., DECEMBER 15, 1907.

Official Paper of the Illinois Grain Dealers' Association.

THE WATERWAYS.

The universality of the demand for waterways improvement is likely to be a stumbling block in the way of real improvement, unless there can be some repression of local claims for immediate work, in the interest of something like standardization and continuity. The new Hennepin Canal in Illinois is a fair example of the lack of standardization, and the Ohio River of lack of continuity.

A boat of maximum capacity for the Hennepin Canal may, of course, find a channel beyond that canal in the Illinois or Mississippi River; but it cannot take a cargo to Chicago because the locks of the I. & M. Canal are much too small. In like manner the locks in the Cumberland and Tennessee Rivers, actual and proposed, are of different sizes, so that a Tennessee River boat is shut out of the Cumberland because of the smaller locks there.

The Ohio River improvement requires, among other things, the construction of thirteen locks and dams in the rapid descent from Pittsburg to Wheeling; and unless all are completed in order no part of the improvement becomes available. The entire thirteen might be constructed in four years; yet by the "pork barrel" method of distributing funds, the locks and dams so far constructed in that river have not been consecutive, so that while \$10,000,000 has been spent on the river for navigation purposes according to the plan of improvement, the expenditure has been without effect; and at the present rate of progress the engineers' plans for that river will not be completed for 150 years. In the same way, the improvements in the Mississippi were stopped at Cairo, a crossing but not a terminus; and so the work done on the lower river has been of no use to St.

Louis, which might use it, nor to the Ohio towns, for reasons given above.

System must be demanded as well as appropriations. The nation has spent money enough on many rivers to have made some of them navigable, like the Mississippi and Ohio, if the work had been done systematically; but it has not. It is time, therefore, to demand a change of method in order that the work completed from year to year may become immediately of use to the shipping public of the immediate neighborhoods.

NATIONAL INSPECTION.

The question of Government inspection of grain has become a "live wire." This new status of the question is not unexpected, for many reasons which have been discussed in these columns at frequent intervals. They need not be repeated now. The issue, however, as the lawyers would say, is now joined, and the grain trade must prepare its defense, if it desires to make a defense.

For this purpose President Reynolds has called a meeting of the board of directors of the Grain Dealers' National Association, to be held at the Claypool Hotel, Indianapolis, beginning at 10:30 a. m. on Monday, December 16. The notice of the meeting has been accompanied by a request to all grain trade organizations and inspection departments to send delegates to this meeting, in order that the conference may include all interests concerned.

Hitherto this matter has been treated by an influential fraction of the grain trade, notably by the Chicago Board of Trade and some other exchanges, as purely an academic question, having perhaps sufficient interest to entertain a grain convention for a half-hour, but without practical merit. This kind of inspection may still be an impracticable thing; but it is now up to those who think so to prove their contention to committees of a Congress which has been appealed to otherwise by both the President and his Secretary of Agriculture.

It will be the duty of the conference of December 16 to formulate the objections of the grain trade, and, if the trade really does object as a whole to national inspection, to do it in a conclusive manner by resolution and the appointment of a committee of defense or counsel at Washington.

MOISTURE TESTING.

There never was a season, perhaps, when the corn generally of this country carried more moisture than it does this season; and already the losses to country buyers in handling new corn are beginning to mount up, careful as most of them are to let the stuff alone. One can readily realize the situation of a buyer who has his trade tied up with contracts made during the roasting-ear season, to be as easy on his country friends as possible and run the risk of getting stuck with wet corn that should remain on the ear where it can dry out, but which farmers are anxious to deliver on their contracts. Farmers do not appreciate, perhaps, any more than do buyers, the amount of the excess mois-

ture, running at the Toledo laboratory from 6 to 10 or even 12 per cent, and therefore do not always treat a refusal to accept such grain graciously.

Here is where the new moisture tester perfected at the Agricultural Department (now sold at a moderate price) becomes useful; the dealer who has one in his office can in twenty minutes demonstrate to the farmer that the corn is not in condition to deliver; and not only that, but the dealer would by making and recording the findings of his tests be in a position to confute a claim of tender on a contract, when he finds it necessary to bring suit to recover damages for default; and we apprehend there will be not a few such suits before this season is over, if dealers insist on their legal rights.

CO-OPERATIVE TROUBLES.

The Society of Equity and the Farmers' Union of the Southwest are both in labor, and the Union in particular is facing a deficit which puts the directors on the anxious seat, the concern not being a limited liability concern. Apparently the Society is in no immediate financial difficulty; but there is a suspicion that both concerns are imitating all republics in their ingratitude. Both were established by newspaper men who were looking to the organizations as a perpetual source of subscriptions, being the "official organs." But in Kansas, where the Union operates, Jas. Butler has started a new organ, which has turned the guns of the *Advocate* on him, while Everett's *Up-to-date Farming* is to be supplanted by another organ; and it now becomes a struggle of the organs for supremacy.

This is probably the beginning of the end. Disruption from rows of this kind has been the fate of nearly all farmers' organizations in the past, which no attempt to defy the laws of nature and economics could prevent. Neither the Union nor the Society has done anyone any harm. They have added to the gaieties of business; but they could hardly hope to last long "kicking against the goads" of violated business principles.

PUBLIC ELEVATOR IN CANADA.

The new elevator in course of construction at Port Colborne, the Ontario entrance to the Welland Canal, has been called the "first government-owned elevator in the world," the elevators of the Intercolonial Ry. and that owned by the Montreal Harbor Commissioners belonging to the public only indirectly, although paid for by public money. The Port Colborne house, with unloading capacity of 60,000 bushels per hour and concurrent loading capacity of 75,000 bushels, is to be operated as a part of the Dominion's canal system, and is expected to reduce the carrying charges on grain from the West to Montreal to 3½ to 4 cents per bushel, as against 6 cents at this time.

The special interest we find in this elevator is the story it tells of the development of the lake grain carrier, the Welland Canal being, in its day, "the solution" of the lake problem, with capacity to lock through a boat carrying

75,000 bushels of grain, whereas there are now boats on the lakes carrying upward of 420,000 bushels. But the Port Colborne house will be able to answer the question, Is it more economical to handle grain in transit from a larger into a smaller carrier than to build and operate canals to float the larger vessel? This is a problem in transportation that this continent has confronting it on both sides the international boundary.

TEXAS ANTI-TRUST CASE.

The Attorney-General of Texas has begun an action against the millers' association (the mere organization of which he styles a "conspiracy") as a trust, alleging a long list of offenses and demanding fines aggregating a large sum, running into millions. A similar suit is pending against the millers' association of Kansas; and the two astute attorney-generals, having obtained copies of letters passed by the secretaries of the two associations, are advising their respective newspaper satellites that they have a "cinch" on convictions.

One with difficulty can speak calmly of this sort of prosecutions of legitimate trade organizations, whose chief function is an endeavor, rarely entirely satisfactory, to control fool members of the trades, who either do not know how to do business or are "too blamed mean" to be in any line of business with which "white men" are concerned. It cannot be the law's purpose to protect that kind of shyster traders in the control and direction of the fortunes of trade and commerce; and we believe that any effort to so stretch the law as to punish men who are trying to do business on the square and in a way to economize cost and save waste for the producer and consumer is a perversion of the law's function.

CAN'T FIND IT.

Senator McCumber's and Secretary Wilson's contention that the grain producers suffer through the inspection in the Northwest is hardly sustained by the examination made in Minnesota by the North Dakota Grain Commission.

Some years ago, it is remembered, a report appeared which disclosed the fact that certain terminal elevators at Duluth shipped out a much larger volume of high-grade wheat than the inspection records showed was inspected in. Therefore, said Senator McCumber in a Senate address, the inspection of Minnesota robbed the grain growers of North Dakota of that wheat by a low inspection and by unfair dockage; and the amount of the robbery was about \$3,000,000 annually, it was said.

It was this condition that led to the introduction in the Senate of the first McCumber bill for national inspection of grain. It gave the Superior bucket-shoppers an argument which led to the creation of the Wisconsin Grain Commission; and finally, last winter, it was the motif of the creation of the North Dakota Grain Commission, whose duty under the statute it is "to investigate and report on the feasibility of building, buying or leasing of terminal elevators by the state at Minneapolis, Duluth or Superior,

or at each of these places, in order to insure a full return to the farmers of that state for their grain."

The Commission recently visited Minnesota's inspection points in which North Dakota shippers are interested; but in spite of the most searching investigation they were unable to find anything wrong with the inspection. They are sure the shippers of North Dakota lose those three millions a year, and say so repeatedly; but for the life of them they can't see how it is done.

The Commission ought to take another tack, and instead of trying to find something that does not exist, should try to trace the low grade stuff they do find back to its point of origin and see who ships it to the terminal and why—see how unintentionally generous the North Dakota farmer has been, when, in point of fact, he might confess to himself, if most men did not habitually labor to deceive themselves, that he has been trying to sell chicken or hog feed as No. 1 Northern and has been caught in the act.

KANSAS DOCKAGE ROW.

Kansas City Board of Trade is still fighting for the 100-lb. dockage in Kansas, where it is unlawful; but because it is unlawful there, the elevator men in interest, who are the only beneficiaries of the dockage, are now trying to "beat his majesty around the bush" by asking for the Minnesota method of estimating the dockage on account of dirt. To this the Kansas men object on the score of impracticability, the Kansas inspection department having declared it could not so estimate the amount of dirt. One does not quite understand how this can be done in Minnesota if it is impossible in Kansas. At least, it seems at first blush a fair way out of the dilemma; for in the case of dockage for dirt the dealer could carry the dockage back to the farmer by using the same method of estimating it when buying; whereas the 100-lb. arbitrary dockage is a dead loss and has no justification as the dirt dockage has.

THE SHERMAN ACT.

It seems to be a foregone conclusion that the "Sherman Law" (anti-trust) will be modified in the near future. Indeed, since the message appeared, giving the President's views regarding that legislation, Mr. Milton D. Purdy, Asst. U. S. Attorney-General, has been engaged in drafting a bill for a substitute. It is said the aim of this bill will be to bring the anti-trust legislation "into harmony with modern business conditions. Instead of prohibiting all combinations, it will exclude only those which work an injustice upon the public. Although designed primarily for the relief of the railroads, it will also be applicable to general corporations engaged in interstate commerce. The President has in mind the needs of manufacturing concerns as well as the railroads, and proposes to broaden the general scope of the new act. Pooling arrangements will be authorized among the railroads after the details of the proposed agreement have been approved by the Federal authorities."

In other words, the desire is to make a law that will "kill if it's a deer and miss if it's a calf"; but in the meantime the railroads will be allowed to pool; so one wonders if an arrangement that twenty-five years ago was practiced freely and openly and was a failure as a means of preventing abuses, will prove more satisfactory under Government direction. If so, how long will it be before the further and perhaps logical step will be demanded of turning the roads over to the Government as owner?

WHY NOT GO SLOWER?

If Paul, the Apostle, were to preach in Chicago to-day he would probably modify his Athenian text—"Ye men of the West, I perceive that in all things ye are too hysterical;" and would proceed to show us, as he easily might, how a good many of our business troubles find their origin in our inability to remain calm when calmness would be a virtue.

Why, for example, rush into print with the declaration that, "One bad feature now is that the farmers have lost considerably more than \$100,000,000 in the shrinkage of grain values, and a great part of our exportable surplus is being sold at low prices as compared with what they were a fortnight ago?" It is fundamental that if we would export our grain we must sell it at slightly lower prices than those of our competitors; and if growers and shippers must have money so badly they are willing to go farther and sell at a sacrifice, no one is harmed. Those who are in position to hold will lose nothing, if the grain is actually worth the higher prices.

As to corn, the probabilities are that the enforced holding of that cereal will benefit all concerned, as happened to those who held last year's crop until after spring opened.

The rate at which all grain was being dumped on the markets and offered faster than the elevators could handle it or railroads forward it must have swamped prices at any event; for it was estimated at November 1 by Western bankers that it would take four months to move the grain then sold.

Why not go slower and urge the farmer to do likewise? Men must eat twelve months in the year; it is not necessary to dump a year's cereal food on them in three or four months.

AS TO DRAFTS.

The Pittsburg Grain and Flour Exchange has adopted a resolution requesting all shippers to make drafts read, "On arrival of the car," and the amount not to exceed three-fourths of the value less freight. Until at least normal banking conditions are everywhere restored shippers must realize that the greatest care must be taken in the matter of making drafts if consignees are expected to give them reasonable service. Be reasonable; remember you are but one out of hundreds—thousands—doing business in the same way; and all must "give and take" in order to keep the game going on in these times.

Editorial Mention.

E. M. Wayne "wants to know." See his letter in "Communicated" department.

Several interesting arbitration decisions are printed this month. Better read them carefully.

How are your fire barrels? See that they are filled with calcium chloride solution, and then they won't freeze.

Secretary Brafford has just issued a new edition of the "Regular Grain Dealers of Indiana," corrected to November 1.

Texas stock men have found that the mesquite bean, as meal, or cake, makes an admirable finishing feed for range cattle.

The winter meeting of the Indiana Grain Dealers' Association will be held at Indianapolis on January 8 and 9. A feature will be a corn show, for prizes offered by the local associations.

Ohio grain dealers and millers are considering the advisability of appointing a joint committee on legislation. As the interests of both are largely identical, the arrangement ought to be beneficial to both.

We have to thank the Philadelphia Bourse for the first specimen of the 1908 calendar—the Bourse's familiar form, of seven days on a single detachable sheet, with daily spaces for memoranda. We use it constantly and have for years.

The secretary of the Grain Dealers' National Association has in press, but nearly ready for distribution, his annual booklet. If your name is not enrolled as an affiliated member, this is an excellent time to get a place on the regular membership list.

We are privileged to print an exceptionally interesting article from the pen of John D. Shanahan, expert in charge of the grain standardization experiments at Washington, which was read at the corn and wheat show at Baltimore; and can commend it to the reader.

The spectacle of a board of trade man fighting the payment of his speculative debts created on the floor of the exchange on the allegation that the deals were gambling transactions is a "sight for gods and man." This surely is the limit, notwithstanding a jury may acquit on such a plea.

The Ohio Grain Dealers' Association is completing arrangements for another series of agricultural lectures from special trains, similar to the successful excursion of a year ago. The lecturers will again be from the Agricultural College of the Ohio State University, and the route will be over the C., H. & D. R. R., stopping at twenty-five to twenty-seven important grain stations. The dates will be

probably January 2, 3 and 4, 1908, with a one-day trip over the Clover Leaf on December 31.

The South is certainly paying more attention to corn than formerly, and the high prices realized on the crop will no doubt increase planters' interest in the crop.

Some changes have been made in some companies' policies of fire insurance in the matter of liability for loss-by-lightning damages. Do you know how your policies read on that form of risk? If not, had you not better find out if you are protected and to what extent?

The Agricultural Club at Rugby, N. D., recently debated the proposition that there should be a farmers' elevator in every town in the state; and the judges awarded the judgment to the negative. The negative orators may have had some experience with co-operation.

The bean trade of Michigan has been suffering this fall from lack of pickers, elevators being full of stock that can only slowly be prepared for market. For this and the further reason that it is more difficult to finance shipments, the trade has been for several weeks quite "in the dumps."

There is one road that may reform—the C. H. & D., which was fined \$200 and costs for discriminating in the matter of furnishing ears to its customers. When this kind of meanness gets to be expensive, as it is going to be hereafter, railroad management will make a virtue of necessity and be fairer.

The Farmers' Congress held recently at Oklahoma City adopted a resolution condemning the free distribution of seeds; but as it deluged the list of needed reforms with so many other queerer demands, there is little hope of Congress paying much attention to any of them, meritorious as at least the one named may be.

The following was posted on the bulletin board of a Farmers' Co-operative Association out in Nebraska on November 12:—"I can't buy any grain. A dead fish floats downstream, but it takes a live one to swim ag'in' the current." First time ever heard of when a farmers' elevator would confess to inability to defy successfully the laws of both nature and man.

The extent of the depression on Wall Street is best indicated by the slump in the price of Stock Exchange seats, which are now quoted at about \$50,000, against \$79,500 on May 1. As the number of seats is limited to 1,100, and when business is booming, the enormous total of commissions paid brokers is divided among such comparatively small number, it is the natural result of the law of supply and demand that the valuation placed on a membership should reach even the record figure of \$95,000. The decline of seat values in Boston and Philadelphia has been much less, ab-

solutely and relatively, Boston's value in 1906 and 1907 being \$35,000, while that of Philadelphia declined from \$12,000 to \$11,000 in 1907.

Sioux City has entered the grain market of the Northwest as an active track bidder for grain. The inspection will be directed by an experienced man from the Chicago office, who will be supported at Sioux City by the bankers and business men of the city, independently of the grain receivers, the Interstate Grain Co., a concern subsidiary to the J. Rosensaum Grain Co. of Chicago.

Governor Harris of Ohio has not made any friends in the Toledo market by his criticism at the Ohio meeting of the grading in that market. We are all of us prone to accept hearsay testimony as truth; but governors, having somewhat the advantage in the repartee, thanks to their exalted position, can do considerably more damage by repeating rumors than can most men in private life.

A movement is on foot, according to the Journal of Commerce, to obtain legislation at the coming session of Congress in behalf of better crop reports; among other things a five-year agricultural census will be asked for. This fact will be a good excuse for those of our readers who have ideas on the subject to offer suggestions. The Agricultural Department will welcome them without doubt.

Fergus Falls is another of the towns whose city council labors under the mistake of believing that bucket-shop gambling is a form of business. In spite of a report of its committee recommending the passage of an ordinance stopping all forms of option trading in town, on the ground that bucket-shops are but gambling shops wearing the "cloaks of respectability," the clerk could only find two aldermen willing to vote for it.

The output of denatured alcohol is as yet small and druggists are not inclined to handle it, as the selling regulations are sadly encumbered with red tape. The influence of the new fluid upon the price of corn so far is, of course, inconsequential; and as not a gallon has as yet been made on the farm, in spite of the modification of the law which enables farmers to distill alcohol from farm refuse, that influence is likely to remain at zero.

A sensible farmer has been telling his neighbors how and why the small grain steadily deteriorates in quality and yield. It is very simple. He says:

Before thrashing machines were invented the best method of selecting the grain for seed was throwing it across a barn floor. A heavy, dense kernel will go farther when thrown than a light, spongy kernel. By taking for seed only the kernels that went the farthest the best was obtained. All weed seeds weigh only from 18 to 43 pounds per bushel, and so fall short.

Then the fanning mills came, the early mills being so equipped that all grain was taken on one screen for separation, instead of first separating the heavy and the light and only using the heavy grain for seed.

Then came the thrashing machine and the farm-

ers were told it would be so improved that they would have no more use for any other method of cleaning their grain. But after 40 years the thrashing machine has been improved to save every kernel of grain that possibly can be saved. If a farmer trusts the thrashing machine to clean his seed grain, his seed is going to deteriorate until it is practically worthless for sowing.

For the same reason the farmer finds his grain grading lower than it used to, because it contains more damaged and shrunken kernels. The thrasher gets more out of his job, but unless the grain is exceptionally good to begin with, the thrasher will certainly hold the farmers to a lower grade of seed and marketable grain year after year.

Bankers in the corn belt are getting wise. They want nothing better than loans on sound grain in store or in transit; but it appears that they are cutting out loans on grain stored for future delivery, or sale. Corn in store unless summer-shelled is about as uncertain property as a man can ordinarily have on his hands, and bankers have found it out—sometimes quite expensively. The habit of handling this wet stuff must be broken off in some way, or grain dealers will have to provide themselves with more capital to use in their business.

The campaign against distillery-fed cattle to be sold for beef has had the effect of largely curtailing that industry, which combined the two demerits of cruelty to animals and of producing unwholesome food. Since the grain drier came into use, however, and distillers's slop, like brewer's spent grains, has been dried, both have found a ready market with the dairymen, for whose use they are most admirably adapted as part of the "balanced ration." For it is a paradox, perhaps, yet a fact for all, that both these feeds, which when wet are to a high degree unwholesome, are, in the dry state, a cheap source of protein, especially valuable for the production of milk rather than of fat in stock.

Nothing really pleases Secretary Wilson like a bounteous harvest—even if he has to manufacture it to order on paper, like some of his corn and cotton of the current year. Compelled to concede in his annual report a shrinkage in grain production this year to "5 per cent below the five-year average," he sees nevertheless a valuation of the crops 10 per cent greater than last year and 17 per cent greater than in 1905, so the farmer is richer than ever before. It's the gay life, this of the farmer, as the Secretary sees it through his spectacles, which note not the juice in new corn nor the trials and tribulations of the man who must get the grain to the consumer. Yet it must be conceded the Department has done much for the farmer and the grain buyer. The crop reports are still a vexation and the Secretary's attitude toward Government inspection has been defined sooner than most of us had believed he would declare himself; but his experiment stations and his Bureau of Plant Industry work have been of immense value to the trade as to the nation. The man who sees the world through rosy-hued

glass always, as does Secretary Wilson, sometimes stumbles over obstructions that commonplace people would discover by occasionally getting the vision focused on the earth—but here's to the "booster," and his name is Wilson.

The seed dealers and nurserymen throughout the country are preparing to ask Congress to modify the postal rates on catalogues issued by themselves and other tradesmen, to the extent of computing the total weight of a consignment, instead of requiring "one cent for each two ounces or fraction thereof." The complaint is made that it is not convenient to publish catalogues in exact weight units, so as to get the full benefit of the postal rate, and that since these are despatched in large quantities the Government should accept the eight cents a pound rate, just as it weighs second-class matter in bulk and despatches it at one cent a pound. This is an interesting proposal; but the seedmen have been fortunate if their experience has not taught them the not quite welcome fact that the post office is a stand-patter of the stand-patters; and that what it wants will be the more likely to meet favor with Congress than what certain patrons of the mails would like.

Much complaint was heard during the worst of the squeeze at the wide margins taken by grain buyers. The complainants did not seem to realize that the then conditions were such as must necessarily obtain whenever the functions of the public exchanges and the banks are suspended, and buyers are compelled to take the large chance of being able to market their purchases without banking and exchange facilities. Under the circumstances the buyer must take sufficient margin to cover the extraordinary risks of his venture. The condition ought to be a reminder to those members of Congress, chiefly from the South, who proposed, as a telegram to the New York Times said the other day, "to put stock, grain and cotton exchanges out of business." Were they out of business, the producers would be skinned from crown to sole; since prices would then be known only to the few consumers and not to the many producers as well, as now is the case.

The Commerce Commission has denied a rehearing in the case of Poor Grain Company vs. the C., B. & Q. Ry. Co., the opinion of the Commission being that "a lawfully published schedule speaks with equal authority to the shipper and to the carrier and both are chargeable with notice of the rate and of the route over which the rate is made applicable. When in responding to an inquiry by a shipper a mistake is made by a carrier, either as to the rate or to the route, this error will not excuse the carrier from collecting the lawful rate nor release the shipper from paying it." This ruling is based on the assumption that railroads are not to be trusted to quote a rate through their agents and stand by it, because they might use a "mistake" as a cloak for de-

liberate cuts. The effect of the ruling, if it be sustained by the courts, is to put railway agents in a class by themselves, all other principals being bound by their authorized acts save railway companies only. Another effect of the ruling will be to give added importance to the calling of the rate expert, for it can easily be seen by a casual examination of such a publication as the *Traffic Bulletin* that only an expert can be at all sure of a rate when he sees it, and not always then, while to the inexpert, a rate schedule is not very much more difficult of deciphering than a Sanscrit poem at first sight.

The secretaries of both the Iowa and Texas associations supply their members with blank forms for use in filing claims for losses in transit. That of Mr. Wells we have taken the liberty of reproducing from his circular letter, kindly sent us. The difficulty most shippers experience in collecting damages from a railroad lies in the fact that few present their claims in such form as common business prudence on the part of a claim agent would require, whether the claim be made direct by the shipper or through the Association's claim bureau. It will do shippers a benefit to study the blank submitted for claim "for loss of weight," and to make a mental note of the office records required for a claimant to properly fill out such a blank and be prepared to substantiate the claim by proofs. And consider the impression that may be made on a claim agent by a claim neatly prepared and accompanied by all the proper documents and proofs—why, a self-respecting claim man could not resist allowing such a claim merely in recognition of a condition that he probably doesn't meet with very often!

A grain buyer operating in a rather important Indiana town recently had a fire which destroyed his warehouse; and then it appeared that he was doing business without keeping a record even of his purchases of grain, and there was absolutely no way for the adjusters to ascertain exactly, or approximately, how much grain was in the house when it burned. He claimed 8,000 bushels, but on what grounds does not appear. This is, of course, an extreme case of business negligence, but not entirely an isolated one, we imagine, if the truth were known. It is so very easy to keep accounts properly, and well-kept books afford so much downright satisfaction to the methodical man, that one wonders more men do not cultivate the art of bookkeeping. As a money-saver, as a plugger of leaks, as a check upon the negligence and incapacity of help, no monitor has been discovered quite equal to a set of well-kept books. And, referring again to the insurance account, a well-kept stock account and invoice book showing the minutest details of the cost and condition of the elevator building, its equipment and its contents, in case of fire loss is worth its weight in gold when the adjustment of loss must be made.

TRADE NOTES

The Hess Warming and Ventilating Co. of Chicago has shipped, among the first orders for U. S. Moisture Testers, machines to Robinson Seed Co., Waterloo, Neb., and to Ohio Cereal Co., Circleville, Ohio.

Stephens-Adamson Manufacturing Co. of Aurora, Ill., have just completed a new powerhouse, the latest adjunct to their large plant. It is a fireproof building of brick, steel and concrete, and houses a new 150-horsepower engine direct connected to a 150-horsepower generator.

The Gump Machinery Co., 53 South Canal Street, Chicago, lists elsewhere in this paper some bargains in elevator machinery of large capacity. We understand that this machinery has been priced with a view to moving it quickly and that early purchasers will be the ones who will benefit.

Henry Stanbery, who has been special agent in Illinois since 1901 for the Millers' National Insurance Co., has resigned his position to engage in the insurance business on his own account. He will do a general insurance brokerage business, in Illinois principally, placing insurance on grain elevators and mills with the principal mutual insurance companies.

The B. S. Constant Co. of Bloomington, Ill., have enjoyed a good year and have bought a machine shop and will add more floor space to accommodate their rapidly growing business. They manufacture grain cleaners, the U. S. Corn Sheller, wagon dumps, man lift, elevator boots and B. S. C. chain drags and feeders, besides other elevator supplies. They wish all in the trade a Merry Christmas and a Happy New Year.

Molinos de Cilindros de Monterey, S. A., Monterey, Mexico, have concluded to increase largely the capacity and make improvements in their mill. Some months ago they let their superintendent, a former resident of the United States, visit the States in order to inspect various makes of sifting machines. The order for the machinery has finally been placed with the Great Western Manufacturing Co. of Leavenworth, Kan., who will furnish the necessary roller mills, purifiers, dust collectors, flour packers and a number of the Great Western Self-Balancing Controllable Sifters.

The December number of Graphite, the interesting monthly publication issued by the Joseph Dixon Crucible Co., Jersey City, N. J., is largely devoted to a description of the company's exhibition at the Atlantic City convention of the American Street and Interurban Railway Association. This exhibit was one of the features of the convention and attracted any amount of attention. The company's line of graphite lubricants and paints was attractively displayed and visitors were made welcome by a staff of representatives under the direction of Manager Chas. H. Spotts. Sample copies of December Graphite will be sent free of charge to elevator owners who write for them.

The Invincible Grain Cleaner Company of Silver Creek, N. Y., in their annual greeting to the trade, say: "We extend our greeting and wish all of our friends and patrons a Merry Christmas and Happy and Prosperous New Year. We also wish to thank them for the business with which they have favored us during the past year and express to them the satisfaction it has given us of filling their orders with the most approved and up-to-date machines on the market. We would further state that it will be our aim in the year to come to improve the good qualities of our line and to adopt all improvements and to bring out any new machines that will enhance

the efficiency of the Invincible line and continue to merit their business."

F. R. Morris of Milwaukee, Wis., has recently concluded a contract with Fagg & Taylor for a large Morris Grain Drier and Cooler of 800 bushels' capacity per hour, to be erected at St. Paul Elevator "B" in Milwaukee at once.

B. D. HECK.

B. D. Heck has been a familiar name to elevator men since 1902 when Philip Smith organized the Philip Smith Manufacturing Company at Sidney, Ohio, and began erecting and equipping grain elevators. Mr. Heck had been with Mr. Smith since 1892, when after finishing his school studies he took charge of the office. Mr. Smith was then manufacturing hollowware and machinery, but the hollowware line was closed out a good many years ago. In 1902 at the reorganization Mr. Heck's name appeared as secretary and treasurer of the



B. D. HECK.

company, with full charge of its general management.

During these five years he has increased the machinery business of the company to more than three times its former volume and done so with proportional profit to the shareholders. As Mr. Heck is still several years on the sunny side of 40 years of age, he has a right to be proud of his record, and doubtless he is.

GLAZIER OF MICHIGAN.

State Treasurer F. P. Glazier of Michigan has become badly involved financially, as the result of many and various ventures. Being state treasurer he was also president of the Chelsea Savings Bank, president of the Glazier Stove Company, president of the Chelsea Grain and Produce Company, president of the Commercial Bank of Stockbridge, president of the Blanchard Wool Company, vice-president of the Dexter Savings Bank and president of the Ann Arbor News Publishing Company.

The Chelsea Grain and Produce Company is not honored with a place in the commercial directories, but it appears from the statement of the Bank Commissioner that it was able to borrow \$67,000, far in excess of the lawful ability of the Chelsea Savings Bank to loan to one individual.

"The worst that can be said of Mr. Glazier in connection with his business affairs from the investigation so far made," says the Free Press, "is that he was an optimist of the visionary sort with a Monte Cristo view of his resources. He anticipated paper and made profits by a most liberal use of money. With a personal indebtedness at his own bank at Chelsea far in excess of the amount allowed by law, he entered into one expensive enterprise after another."

[Circular Kansas Department of Agriculture.]

KANSAS, THE HOG'S HAPPY HABITAT.

BY F. D. COBURN,
Secretary Kansas Department of Agriculture.

It was well said by a former cabinet minister that in the American hog we have an automatic, combined machine for reducing bulk in corn and enhancing its value. That he is a mint, and the corn of our common country the bullion he transmutes into golden coin.

In Kansas he finds the favored zone—his El Dorado—and here he always makes both ends meat. For Kansas is a corn orchard parked with grasses and fragrant with the bloom of alfalfa, the greatest forage plant vouchsafed by providence to men; growing here in a profusion elsewhere unknown. Hence it is that Kansas possesses more of these latest model self-lubricating mortgage removers than all New England and fifteen other states and territories added.

Uncle Sam, our foremost connoisseur of pork, but with no especial partiality for Kansas, recorded in a report for January of this year 1907, that the Kansas hogs are worth "per capiter" 15 per cent more than the Missouri hog; 36 per cent more than the Kentucky hog; 56 per cent more than his Virginia compatriot; 97 per cent more than the Arkansas hog, and 148 per cent more than Florida's favorites.

There is probably no other territory of the same area as Kansas where the conditions of climate, soil, food and care are more congenial to the hog's health and wholesome development, and he is nowhere found so developed except among and by a high order of people. High-class swine are unknown and impossible among a low-class people.

Kansas swine, coinage of Kansas grass, grain and brain, in the world arena at Chicago and then at St. Louis met the world beaters and beat them. She has given Poland, China, Chester County, Berkshire and New Jersey a thousand years the lead and easily distanced the namesakes of all.

The Kansas hog, in his sphere typifying the good, the true and the beautiful, is a joy even to the Hebrew, and like the state that lends him as a solace to humanity is in but the morning of his career. His one passport, everywhere demanded and always sufficient for entree to presidents, potentates or peasants, is—

"KANSAS" on the rind.

TO H. S. GRIMES.

The following preamble and resolutions were adopted by the board of directors of the Cincinnati Chamber of Commerce of Cincinnati, Ohio, on November 5, 1907:

Whereas, The Board of Directors of the Cincinnati Chamber of Commerce experiences satisfaction in the selection of this city for holding the Eleventh Annual Meeting of the Grain Dealers' National Association, which was held here on October 2 and 3, and which gathering bore abundant evidence of accomplishing in high degree the objects in view in the work of such Association in promotion of understandings among the membership and others in trade practices and requirements; and

Whereas, Mr. H. S. Grimes of Portsmouth, Ohio, was chiefly instrumental in securing the holding of this meeting in this city; therefore,

Resolved, By the Board of Directors of the Cincinnati Chamber of Commerce, that a vote of thanks to Mr. Grimes is hereby ordered, in appreciation of his efforts in securing this meeting for Cincinnati.

Country dealers who have been paying high prices for corn recently have made some big losses. One of the farmers' co-operative companies at an Illinois point recently bought large quantities of no grade corn at an average of 54c in an effort to out-bid a competitor. The bulk of this corn came on sale Monday during the wet weather, when receipts were very large, and was marketed at 41c, thus showing a big loss to the dealer.—Record-Herald.

WHY CONCRETE FALLS.

Quoting from a recent report of the National Fire Protection Association, Cement Age says that the experiences of this past year have given additional proof of the gross carelessness and incompetence which have prevailed in many important works in reinforced concrete construction. There have been several instances of the collapse of large and expensive buildings in course of construction, which have in every case been traced to the neglect of well-known rules of safety.

For instance, in one case the direct superintendence of the work was left to cheap help, who did not appreciate the necessity for accurate and careful workmanship; and the result was too little cement, too little water, or improper mixing, which allowed the collapse of the building wall before it was half up.

In several cases the concrete had been allowed to freeze while under construction and naturally fell down upon the removal of the forms; the wooden molds had not been properly cleaned out before receiving the concrete, with the result that shavings, blocks of wood, and other refuse have been imbedded in concrete in a way to create vital weaknesses at important points. Reinforcing rods have been misplaced or omitted entirely; concrete foundations have been laid in mud; blocks of wood, for the purpose of holding fixtures, have been found purposely cast in the bottom of beams in such a way as to expose the steel reinforcement when the block was burned or knocked out. The design of such buildings should be undertaken only by engineers of special training and experience along this line.

The new Agronomy Building of the University of Wisconsin is completed and occupied by students. The building, which is three stories high and 98x48 feet in size, contains a storeroom for grains and seeds, a room for curing corn, one for sampling grain, and a large, well-lighted room for the work in judging corn and grains, besides various class rooms.

WHEAT RECEIPTS AT PRIMARY MARKETS.

Receipts of wheat at winter and spring grain markets for 23 weeks, since June, with comparisons, in bushels, compiled by the Cincinnati Price Current:

	1907.	1906.
St. Louis.....	11,931,000	10,878,000
Toledo.....	3,784,000	3,868,000
Detroit.....	711,000	1,478,000
Kansas City.....	21,488,000	27,078,000
Winter wheat.....	37,861,000	43,302,000
Chicago.....	17,714,000	23,528,000
Milwaukee.....	4,979,000	4,754,000
Minneapolis.....	31,306,000	34,316,000
Duluth.....	32,522,000	30,261,000
Spring wheat.....	86,521,000	92,857,000
Aggregate, 23 weeks.....	124,385,000	136,159,000

Total receipts of winter and spring wheat at primary markets 23 weeks since June, 1907, with comparisons:

	Winter.	Spring.	Total.
1907.....	37,864,000	86,521,000	124,385,000
1906.....	43,302,000	92,857,000	136,159,000
1905.....	49,133,000	95,803,000	144,936,000
1904.....	44,397,000	89,241,000	133,638,000
1903.....	41,357,000	89,857,000	131,214,000

EXPORTS FROM ATLANTIC PORTS.

The exports of breadstuffs, as compiled by George F. Stone, secretary of the Chicago Board of Trade, from the Atlantic ports during the two weeks ending December 7, 1907, as compared with same weeks last year, have been as follows:

Articles.	For Week Ending Dec. 7.		For Week Ending Nov. 30.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	3,495,000	2,844,000	3,609,000	3,163,000
Corn, bushels.....	583,000	1,295,000	1,014,000	1,400,000
Oats, bushels.....	16,000	13,000	7,000	123,000
Rye, bushels.....	56,000	.....	65,000	.....
Barley, bushels.....	14,000	193,000	.....	212,000
Flour, bbls.....	294,900	202,200	193,400	340,400

RECEIPTS AND SHIPMENTS.

Following the receipts and shipments of grain, etc., at leading receiving and shipping points in the United States for the month of November, 1907:

BALTIMORE—Reported by H. A. Wroth, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	1,699,855	646,629	1,627,122	185,221
Corn, bushels.....	1,031,987	1,189,551	421,701	1,098,480
Oats, bushels.....	303,812	333,011	144	16,050
Barley, bushels.....	.....	.....	.....	.....
Malt, lbs.....	.....	.....	.....	.....
Rye, bushels.....	91,035	91,055	17,142	.....
Timothy Seed, lbs.....	.....	673	3,992	2,556
Clover Seed, lbs.....	680	.....	.....	553
Hay, tons.....	5,670	7,153	2,142	1,712
Straw, tons.....	.....	.....	.....	.....
Flour, bbls.....	288,988	311,002	123,819	115,353
Mill feed, tons.....	.....	.....	.....	.....

BOSTON—Reported by Daniel D. Mor-s, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Flour, bbls.....	218,536	238,725	93,731	81,619
Wheat, bushels.....	2,040,214	2,049,539	869,749	790,120
Corn, bushels.....	669,535	268,992	690,539	190,461
Oats, bushels.....	374,439	413,107	1,196	400
Rye, bushels.....	14,735	5,885	.....	.....
Barley, bushels.....	2,800	1,785	.....	13,218
Flax Seed, bushels.....	40,652	91,449	22,900	90,904
Mill Feed, tons.....	2,865	943	54	214
Cornmeal, bbls.....	2,456	5,692	1,395	2,188
Oatmeal, bbls.....	8,593	16,443	4,022	4,002
Oatmeal, sacks.....	6,281	7,010	1,719	10,858
Hay, tons.....	15,440	11,810	71	34

CHICAGO—Reported by Geo. F. Stone, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	1,114,610	1,745,472	4,480,624	1,706,935
Corn, bushels.....	4,137,753	6,437,419	4,647,670	5,546,090
Oats, bushels.....	5,706,795	7,330,897	5,012,169	6,231,339
Barley, bushels.....	1,240,893	2,443,026	566,533	1,072,797
Rye, bushels.....	217,840	288,099	89,817	251,678
Timothy Seed, lbs.....	5,816,585	4,585,943	2,149,290	774,182
Clover Seed, lbs.....	467,600	897,837	380,604	211,955
Other Grass Seed, lbs.....	1,134,560	1,930,000	4,179,728	4,672,903
Flax Seed, bushels.....	177,243	412,093	6,000	9,559
Broom Corn, lbs.....	2,975,329	2,278,601	1,828,595	1,679,411
Hay, tons.....	30,954	22,732	1,714	3,273
Flour, bbls.....	707,393	769,158	1,070,971	855,302

CINCINNATI—Reported by C. B. Murray, superintendent of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	270,728	234,540	215,568	224,758
Corn, bushels.....	438,193	700,944	282,518	283,625
Oats, bushels.....	447,504	529,908	303,222	267,419
Barley, bushels.....	111,060	149,092	1,010	30
Malt, bushels.....	193,528	132,718	54,272	56,746
Rye, bushels.....	46,044	86,468	5,348	33,102
Timothy Seed, bags.....	8,248	2,131	2,474	2,134
Clover Seed, bags.....	1,259	3,066	1,474	1,238
Other Grass Seed, bags.....	15,474	14,075	12,323	10,380
Hay, tons.....	14,006	15,678	8,767	10,418
Flour, bbls.....	138,036	126,612	72,555	76,107

CLEVELAND—Reported by M. A. Havens, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels, water.....	58,000	75,000	.....	.....
Do rail.....	45,745	99,890	43,966	107,097
Corn, bushels, water.....	.....	.....	.....	.....
Do rail.....	262,322	1,025,720	159,890	498,680
Oats, bushels, water.....	129,670	.....	.....	1,500
Do rail.....	380,865	638,944	123,505	182,709
Barley, bushels, water.....	80,000	73,700	.....	.....
Do rail.....	14,088	15,282	.....	.....
Rye, bushels.....	.....	.....	.....	.....
Flax Seed, bushels, water.....	.....	.....	.....	.....
Do rail.....	.....	.....	.....	.....
Hay, tons, water.....	.....	.....	141	.....
Do rail.....	5,095	5,399	564	2,146
Flour, barrels, water.....	.....	.....	.....	.....
Do rail.....	52,770	71,260	21,700	34,700

DETROIT—Reported by F. W. Waring, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	107,934	211,512	15,776	21,889
Corn, bushels.....	330,305	662,150	132,050	73,781
Oats, bushels.....	240,570	270,282	12,872	7,024
Barley, bushels.....	137,440	171,969	4,680	.....
Rye, bushels.....	17,857	37,004	54,640	29,313
Flour, bbls.....	16,200	11,600	7,600	5,200

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	9,618,549	9,346,123	9,297,163	8,705,296
Corn, bushels.....	.....	4,439	1,043	21,459
Oats, bushels.....	558,317	447,038	258,193	327,493
Barley, bushels.....	1,025,497	2,200,771	1,745,836	2,208,593
Rye, bushels.....	85,189	115,453	94,171	29,383
Flax Seed, bushels.....	5,560,410	5,214,131	4,690,854	3,982,665
Flour, bbls.....	884,075	9,7530	1,061,930	977,030

GALVESTON—Reported by C. McD. Robinson, chief Inspector of the Cotton Exchange and Board of Trade.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	1,360,508	1,346,231
Corn, bushels.....	413,570	218,570
Oats, bushels.....
Barley, bushels.....

KANSAS CITY—Reported by E. D. Bigelow, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	1,466,000	3,055,000	2,461,000	2,487,000
Corn, bushels.....	671,000	1,100,000	405,000	575,000
Oats, bushels.....	253,500	651,000	216,000	538,500
Barley, bushels.....	12,000	44,000	7,000	3,000
Rye, bushels.....	9,000	18,000	3,000	2,000
Flax Seed, bushels.....	5,600	9,600	1,600	3,200
Bran, tons.....	1,275	1,875	4,215	5,595
Hay, tons.....	16,440	9,050	5,200	5,420
Flour, bbls.....	9,000	14,600	121,400	144,800

MILWAUKEE—Reported by Wm. J. Langson, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	750,635	1,090,253	332,775	578,500
Corn, bushels.....	153,000	138,700	262,120	150,661
Oats, bushels.....	792,000	975,150	724,342	784,501
Barley, bushels.....	1,418,400	2,691,600	594,765	1,437,696
Rye, bushels.....	109,840	199,300	58,982	169,886
Timothy Seed, lbs.....	1,664,160	493,515	334,500	390,103
Clover Seed, lbs.....	892,975	1,463,395	.....	561,525
Flax Seed, bushels.....	4,240	9,540	.....	.....
Hay, tons.....	2,405	1,795	.....	174
Flour, bbls.....	331,875	359,925	438,569	397,845

MINNEAPOLIS—Reported by John G. McHugh, secretary of the Chamber of Commerce.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	7,845,350	8,369,170	1,924,730	1,614,160
Corn, bushels.....	339,330	227,400	174,710	87,120
Oats, bushels.....	1,391,700	2,988,630	2,007,390	1,541,110
Barley, bushels.....	1,575,740	1,503,180	1,700,500	1,087,870
Rye, bushels.....	178,700	297,990	111,990	242,160
Flax Seed, bushels.....	1,357,250	1,440,560	720,670	592,540
Hay, tons.....	3,810	2,700	470	80
Flour, bbls.....	24,942	23,463	1,067,970	1,318,648

MONTREAL—Reported by George Hadrill, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	2,860,449	3,186,417	3,284,361	3,305,871
Corn, bushels.....	503,881	750,023	661,873	999,711
Oats, bushels.....	121,009	173,387	4,376	117,864
Barley, bushels.....	139,133	226,502	24,235	231,469
Rye, bushels.....	56,000	.....	55,943	.....
Flax Seed, bushels.....	230,509	339,252	93,873	213,511
Flour, barrels.....	133,285	110,981	263,227	178,626

NEW ORLEANS—Reported by H. S. Herring, secretary of the Board of Trade.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	1,825,000	556,000	441,200	1,536,000
Corn, bushels.....	262,000	786,000	1,107,681	199,737
Oats, bushels.....	325,100	382,400	182,240	170,025
Barley, bushels.....	.....	.....	.....	.....
Rough rice.....	.....	.....	.....	.....
Clean rice pockets.....	.....	.....	.....	.....
Hay, bales.....	68,934	57,860	3,726	13,173
*Flour, bbls.....	181,920	39,652	60,014	156,163

*Through consignments of flour to Europe not included in receipts.

NEW YORK—Reported by H. Heinzer, statistician of the Produce Exchange.

Articles.	Receipts.		Shipments.	
	1907.	1906.	1907.	1906.
Wheat, bushels.....	4,901,600	3,514,700	3,108,287	2,805,219
Corn, bushels.....	1,345,850	1,029,425	829,608	577,194
Oats, bushels.....	2,806,800	3,463,600	68,540	144,403
Barley, bushels.....	575,582	921,200	6,650	212

ELEVATOR AND GRAIN NEWS

ILLINOIS.

A farmers' elevator company is being promoted at Cornell, Ill.

Another elevator is being constructed at Mackinaw, Ill., by the Vandalia Railroad Co.

A new elevator is under construction at New Berlin, Ill., for the Farmers' Elevator Co.

O. H. Fullenwider's new elevator at Mechanicsburg, Ill., is rapidly approaching completion.

Erick Grunsted and E. M. Grunsted, his son, of Elliott, have purchased an elevator at East Lynn, Ill.

Fiery Bros. of Edinburg, Ill., are installing several pieces of new machinery in their elevator.

The Avery Scale Co. is furnishing one of its 1,000-bushel Automatic Scales to S. A. Hendee of Bushnell, Ill.

William J. Roller of Newman, Ill., is building an addition to his elevator. Fireproof material is being used.

Miles & Ricketts of Fisher, Ill., have dissolved partnership. R. T. Miles will continue business as R. T. Miles & Co.

The Prentice Farmers' Elevator Co. of Prentice, Ill., has lately ordered an Avery Automatic Scale of 1,000 bushels' capacity.

McFadden & Co. of Havana, Ill., is installing an Avery Automatic Grain Scale of 1,000 bushels' capacity in their elevator.

Work on the new elevator being erected at Eleroy, Ill., by Meyers Bros. of Sciota Mills is rapidly nearing completion.

Recently the Neola Elevator Co. tore down its old cribs at Harlan, Ill., and had them rebuilt on property near its elevator.

Recently the Lacharite-Jacobs Grain & Lumber Co. of Assumption, Ill., changed its name to that of the Lacharite Grain Co.

Fred Rose, who lately acquired the Parrish Elevator at Homer, Ill., is increasing the capacity from 45,000 to 100,000 bushels.

A contract was recently let by the Spires Elevator Co. for the erection of an addition to its plant at Spires, Ill., costing \$4,870.

Cook Bros.' Grain Co. of Wapelo, Ill., has selected a Richardson 1,000-bushel Automatic Elevator Scale for installation in its plant.

The Weller Manufacturing Co. of Chicago, Ill., has ordered an Improved Hall Signaling Grain Distributor for an elevator at Prentice, Ill.

E. R. Ulrich & Sons, Springfield, Ill., recently ordered an Automatic Elevator Scale, weighing 5 bushels at a charge, from the Richardson Scale Co.

The Herron-Patterson Co. of Milford, Ill., is installing an Avery Automatic Scale, with a capacity of 2,000 bushels per hour, in its elevator at that place.

An Automatic Scale of 1,500 bushels' capacity is being installed by the Bryce Farmers' Elevator Co. of Milford, Ill. It is furnished by the Avery Scale Co.

W. H. Coulthard has sold his grain establishment at McClusky, Ill., to Chappell & Chappell and has gone to Jerseyville, Ill., where he operates a similar plant.

Graham Bros.' Co. of Rock City, Ill., has been incorporated with a capital stock of \$1,000, to deal in grain, etc. Those interested are J. H. Graham, H. Graham and D. F. Graham.

Articles of incorporation have been filed by the Lena Elevator Co. of Lena, Ill., which is capitalized at \$2,500. Those interested are John Reeder, Elizabeth Reeder and A. W. Reeder.

The Woolcott Milling Co. of Harrisburg, Ill., is installing an Automatic Grain Scale in its elevator. The machine has a capacity of 1,000 bushels per hour and was supplied by the Avery Scale Co.

Early in December the Hawkeye Elevator "A" at West Hammond, Ill., was sold by Richard Fitzgerald to the Superior Malting Co. for \$100,000. The bill of sale includes the elevator and adjoining buildings, machinery, good-will, etc. Mr.

Fitzgerald has given the same company a lease on the ground for 96 years.

Thomas A. Brown has disposed of his elevator at Lewiston, Ill., to an organization of farmers.

The Richardson Scale Co. has lately received an order for an Automatic Elevator Scale, with a capacity of 12 bushels per charge, for installation in the plant of the Allen Grain Co. at Decatur, Ill.

The Beggs, Lewis & Kaiser Elevator at Alexander, Ill., which was destroyed by fire late in November, is to be rebuilt and the contract has already been let. Work will be commenced at once.

Articles of incorporation have been filed by the Speer Elevator Co. of Speer, Ill. The company is incorporated at \$6,000 and is controlled by William Hildebrand, E. E. Stisser and Robert Stocks.

Machinery for the new 30,000-bushel elevator the Arrowsmith Grain, Lumber & Coal Co. has erected at Arrowsmith is now being installed by the Skillin & Richards Manufacturing Co. of Chicago.

A farmers' co-operative company is being organized in the vicinity of Lewistown, Ill., to operate the elevator lately belonging to T. A. Brown. Mr. Brown recently allowed the plant to leave his possession on a mortgage.

Farmers in the vicinity of Bethany, Ill., have organized a co-operative grain company and have acquired the Scott Elevator at a figure of \$17,000. It is a 60,000-bushel plant, with crib room for another 30,000 bushels of grain.

It is reported as probable that Powell & Sipp will build another elevator at Tuscola, Ill., in the spring to replace the one burned a year or more ago. As yet no site has been secured, although several are under consideration.

Glen R. Swank & Co. of Galesburg, Ill., have been incorporated for the purpose of dealing in grain and farm products. The firm is capitalized at \$12,000, with C. M. Swank, Lake W. Sanborn and Philip S. Post as incorporators.

Wheelock & Peterson Bros. have sold their elevator at East Lynn, Ill., to E. M. Grundsted & Co. of Rankin, Ill. This sale leaves them with but two more plants, one at Fountain Creek, Ill., and another at East Lynn.

It is announced the firm of G. L. Barnett & Co., merchandise and grain dealers at Barnett, Ill., dissolved partnership and a new firm has been organized under the name of the G. W. Barnett Grain and Mercantile Company. G. L. Barnett will be manager of the new firm.

Articles of incorporation have been filed by the Brocton Elevator Co. of Brocton, Ill., which is capitalized at \$15,000. The new firm will deal in grain, hay, etc. Among those interested are William C. Price, J. W. Shepherd and James W. Cryder.

A. D. Ricketts & Co. of Champaign, Ill., have bought the elevator at Fisher, Ill., of Frank L. Warner. C. D. Ricketts, formerly of Miles & Ricketts, will be manager of the elevator. The sale was made through James M. Maguire of Campus.

The Seneca Grain, Lumber & Supply Co. of Seneca, Ill., will build a new elevator at that place and a committee is now considering a site. Last year the company turned away more than 100,000 bushels of corn owing to the lack of cars and storage room.

Construction work on the new \$5,000,000 plant to be built by Corn Products Refining Co. at Summit, a suburb of Chicago, Ill., has already been commenced, although not much will be done until spring. The plans call for the erection of thirty-three buildings on a site, 110 acres in extent, near Summit, adjoining the drainage canal. It is expected that about one-half of the buildings will be completed by next October. A frontage of 1,400 feet on the drainage channel has been leased from the sanitary district and it is purposed to construct twenty miles of railroad track to afford adequate transportation facilities. This will give the company connection by its own rails with seven trunk lines and five belt lines. The capacity of the works the first year will be a loaded car movement of 125 cars a day, in and out. This will mean the employment of 750 people. One of the largest structures is to be a storage and transfer elevator of 1,250,000 bushels' capacity. The interior is to be of tile and concrete. All buildings of three or four stories will be of reinforced concrete. The taller buildings are to be of the steel skeleton type. All floors and roofs will be of reinforced concrete. The principal manufactured products are to be glucose, solid sugars, mill starch, anhydrous sugar, refined

starch, gluten feed and corn oil. It also will manufacture everything necessary to the marketing of its products.

EASTERN.

A new grain elevator has just been installed at Fitzwilliam, N. H.

D. W. Dietrich of Philadelphia, Pa., has ordered a 1-bushel Grain Scale from the Richardson Scale Co.

A 3-bushel Automatic Bagging Scale made by the Richardson Scale Co. will be installed by George N. Reinhart & Co. of New York, N. Y.

A 5-bushel Automatic Receiving Scale has been purchased by the General Flour & Feed Co. of Syracuse, N. Y., from the Richardson Scale Co.

The Marlboro Grain Co., which is building a grain elevator at Worcester, Mass., has contracted for 50-horsepower motors to drive the machinery with.

The St. Albans Grain Co. of Portland, Me., has voted to increase its capital stock from \$50,000 to \$100,000, the same to be divided into 4,000 shares, valued at \$25 each.

Griswold & Adams are having plans prepared for an elevator to replace the one that burned at Dalton, Mass. It will be 40x80 feet in size and three stories high. The basement will be of concrete construction and the rest cribbed in.

MISSOURI, KANSAS AND NEBRASKA.

Cooney & Miller have their new elevator about completed at Mayetta, Kan.

The new Farmers' Elevator at Sylvia, Kan., is rapidly nearing completion.

B. F. Latshaw has completed an 8,000-bushel elevator on his farm near Pratt, Kan.

An 18,000-bushel elevator has lately been completed for Weber & Penano at Kanopolis, Kan.

J. H. Cavanaugh of Effingham, Kan., will add a feed business to his grain and seed business.

Workmen are rapidly completing their work on the Hoskinson & Collins Elevator at Burrton, Kan.

The Updike Grain Co. of Omaha, Neb., has increased its capitalization from \$1,000,000 to \$2,000,000.

E. B. Allen, a farmer near Iola, Kan., is building a 2,000-bushel elevator on his farm at a cost of \$3,200.

F. P. Miller of Chetopa, Kan., has sold his grain business to C. N. Bunds and will retire to a farm near town.

The Northrup Milling Co. of Platte, Neb., is now operating the Rushville (Neb.) Elevator with R. G. Brown in charge.

T. C. Wilson of Walton, Neb., recently purchased a Richardson Automatic Elevator Scale to weigh 1,000 bushels each hour.

Gifford Bros. have acquired J. L. Wilkin's Elevator at Jamestown, Kan. Mr. Wilkin has purchased the Baker-Crowell Grain Co.'s plant at Bigelow, Kan.

An Automatic Grain Drier has been installed by the Stevens-Scott Grain Co. of Wichita, Kan., in connection with its plant at the joint yards in the northern part of the city.

The New Era Milling Co. of Arkansas City, Kan., contemplate building a new corn crib at Ashton, Kan. Last year about 25,000 bushels of corn were piled on the ground at this place.

The Updike Grain Elevator Co. of Bruning, Neb., is repairing and overhauling the machinery in its elevator. A new driveway has been put in and other machinery installed. F. Muscheites is manager.

After having been delayed several days, owing to the non-arrival of material, work is now progressing rapidly on the Wakenda (Mo.) Elevator. The building will rest on a concrete foundation.

Elevators of the McCaull-Webster Co. at Uehling, Winslow, Woodcliffe and other points along the Burlington's Sioux City-Ashland line in Nebraska, have resumed purchasing grain after a temporary shut-down due to the money stringency.

Gibbon & Reid will soon have their new elevator at Burlington, Kan., completed and in operation. It is expected to start the machinery on December 16. The building is on the site of the old steam mills, which were burned some months ago. The main building is 34x40 feet, with a dump 14x40, and there is an engine room 38x38 feet. The roof to the elevator is now going on and the work in all lines is being pushed. The engine, a 25-horsepower gas and gasoline machine, has been here for a week or more and the other machinery has been shipped

and will be here soon. Work has been somewhat hindered owing to the non-arrival of some of the lumber, but recently has proceeded more rapidly.

The Central Granaries Co. of Lincoln, Neb., has acquired all the stock of the Nebraska Elevator Co., and the two concerns are now conducted as one from the former's offices. The Nebraska Elevator Co. sold its eight Rock Island elevators to John B. Wright and has left only ten on the Union Pacific. About \$75,000 is involved in the consolidation.

J. H. Wright, Jr., for the past dozen years with the Omaha Elevator Co., has acquired the interest of Arthur English in the Nebraska & Iowa Grain Co. of Omaha, Neb. He will become assistant manager and treasurer of the company. When Mr. Wright retired from the Omaha Elevator Company, October 1, he expected to enter business for himself and planned to open an office among the mile of grain offices in the Brandeis Building. When Mr. English announced his desire to go abroad and leave business for a time, Mr. Wright became a member of the firm which Mr. English left.

It is reported that Horace G. Burt and Mr. Schneider of the Nye-Schneider-Fowler Co. have agreed on a proposition for the erection of a spacious grain elevator in Albright, Neb., on the property recently purchased. The tract contains more than 120 lots near the Union Pacific tracks at South Omaha. The suggested location gives the inspiration, since the Missouri River navigation has become a live proposition, that this elevator would be by far the one of most easy access to the Missouri. Very little work would be required to convey the grain from such a elevator to boats landing opposite Monroe Street. It is said that Mr. Schneider and Burt went to Oregon recently to engage lumber for the construction of the elevator. It is anticipated that the financial flurry may cause a temporary suspension of the project.

IOWA.

There is some talk of building a grain elevator at Plover, Iowa.

It is understood the D. Rothschild Grain Co. will erect an elevator at Downey, Iowa.

A 6-bushel Richardson Elevator Scale will be installed by Harlan Bros. of Harrisville, Iowa.

A new flour and feed house, 16x32 feet in size, has just been completed by the Farmers' Elevator Co. at Lowrie, Iowa.

The financial stringency has held up the work of collecting subscriptions for the construction of an elevator at Clarion, Iowa.

Hennessy & Kirchner, grain dealers at Keokuk, Iowa, have dissolved partnership. Mr. Hennessy has retired from business.

The Neola Elevator has been closed at Jolley, Iowa, and W. M. Leonard, the manager, has been transferred to Farlin, Iowa.

Walter Harrison of Packwood, Iowa, has acquired the grain elevator at Pekin, Iowa, and will make extensive improvements. A new engine will be installed.

The Farmers' Grain Co. has started up its new elevator at Akron, Iowa. A. R. Whitney is president of the company. A concrete foundation supports the building.

The Farmers' Co-Operative Association has completed the remodeling of the old mill at Ireton, Iowa, into a 30,000-bushel elevator and R. L. Staben has been engaged as manager.

The office of the Lockwood Grain Co. at Ames, Iowa, has been remodeled and enlarged. A new scale will be installed over a concrete pit. A new storage house will replace the old one just razed.

C. E. Holcomb of Buffalo Center is building an elevator at Dysart, Iowa, which will be operated by a Mr. Claussen. The plant, which is modern in every respect, is practically completed, as is the office.

An order has lately been received by the Richardson Scale Co. for an Automatic Scale to weigh 1,500 bushels of grain each hour, to be installed in the plant of the D. Rothschild Grain Co. at Long Grove, Iowa.

The newly organized Muscatine County Grain & Elevator Co., which is capitalized at \$25,000, is arranging to build a 15,000-bushel elevator at Stockton, Iowa. A specialty will be made of handling barley, which is a large crop in that vicinity.

Britson & Swanson, grain dealers at Roland, Iowa, have secured the interests of the Kansas City Elevator Co. at that place. The purchase includes the elevator formerly owned by Cook Bros. of Mar-

shalltown, who now own another elevator at Roland.

B. F. Orr has sold his elevator at Trear, Iowa, to a line company. Jim White has been appointed agent.

Articles of incorporation have been filed by the Farmers' Grain & Coal Co. at Jamaica, Iowa. The company is capitalized at \$10,000 and has recently purchased the two elevators formerly owned by W. E. Moore. D. W. Myers and others are interested in the firm.

CANADIAN.

The Pacific Grain Co. is operating at Calgary, Alta.

McCabe Bros. contemplate building an elevator at Haskett, Man.

The Northern Elevator Co. has its plant completed at Foxwarren, Sask.

R. J. Lund has completed his new 35,000-bushel elevator at Asquith, Sask.

Fire destroyed the grain elevator at Caledonia, Ont., on November 13.

Grain was received at the new elevator in Battleford, Man., on December 2.

An elevator will be erected by the Northern Elevator Co. at Pipestone, Man.

The Port Arthur Elevator Co., Ltd., is a new corporation recently organized at Port Arthur, Ont.

The Western Canada Flour Mills Co. is building a 50,000-bushel grain elevator at Yorkton, Sask.

The Renfrew Roller Mills Co. has purchased the elevator at Kingston, Ont., formerly sold by A. A. Wright.

The Grand Valley Elevator Co. of Grand Valley, Ont., has surrendered its charter to the authorities at Toronto.

It is understood the McCabe Elevator Co. of Minneapolis, Minn., will build a 50,000-bushel elevator at Brandon, Man.

The Medicine Hat Milling Co. of Medicine Hat, Alta., has completed an 80,000-bushel elevator in connection with its new mill.

A new 600,000-bushel elevator built for the Ogilvie Flour Mills Co. at Fort William, Ont., has just been completed and opened.

McLaughlin & Ellis, Ltd., is the style of a new \$100,000 corporation at Winnipeg, Man., which proposes to conduct a general elevator business.

D. J. Murphy, foreman of the Great Northern Elevator at Quebec, Ont., for the past six years, accidentally shot himself while cleaning a revolver on November 11.

About 400 cars of grain are handled each day by the elevators at Port Arthur, Ont. It requires the employment of nine locomotives during the day and four at night to keep the cars moving.

DAKOTAS.

A new elevator is being erected at Tulare, S. D.

A new elevator is being constructed at Burkmere, S. D.

A new elevator is to be built at James, S. D., next spring.

Southall & Co. are new in the grain business at Martin, N. D.

The Rothsay Elevator Co. has closed its house at Donnybrook, N. D.

Farmers in the vicinity of Welford, N. D., have organized an elevator company.

Andrews & Gage have installed a wheat cleaner in their elevator at Drayton, N. D.

The Hewett & Conner Elevator at Badger, S. D., is rapidly approaching completion.

The Woodworth Elevator Co. has closed its plant at Bisbee, N. D., for the season.

McCabe Bros. recently had a new wheat cleaner installed in its Hamilton (N. D.) plant.

The Andrews & Gage Elevator at Goodrich, N. D., has a new 18,000-bushel addition.

An annex is being built onto the Great Western Elevator Co.'s plant at McCluskey, N. D.

A farmers' company is being organized at McKenzie, N. D., to buy or build an elevator.

The Burris Elevator & Grain Co. is receiving grain in its new elevator at Glen Ullin, N. D.

The Thorpe Elevator Co. contemplates installing new scales in its plant at Geneseo, N. D.

More than 100,000 bushels of grain have been received at the Judson Mercantile Co.'s Elevator in Mandan, N. D., this season. This means the

elevator has been filled four times, which has kept the employes busy night and day.

The Brinsmade (N. D.) Farmers' Elevator Co. has built a 40,000-bushel addition to its plant.

The Plymouth Elevator Co. has been succeeded by the Sullivan Elevator Co. at Medford, N. D.

H. Peoples has secured an elevator site at New Rockford, N. D., and may build in the spring.

An up-to-date grain cleaner has been installed by Senger & Co. in their elevator at Harvey, N. D.

A farmers' elevator company is being organized at Landa, N. D., and over \$5,000 has been subscribed.

It is announced that the McLean County Farmers' Elevator at Garrison, N. D., has gone out of business.

Recently the Ellendale Grain & Produce Co. leased the Empire Elevator Co.'s plant at Ellendale, N. D.

The Duluth Elevator Co. is operating its elevator at Harwood, N. D., which was closed for two seasons.

A 10,000-bushel annex has just been completed by Steinkopf & Grow, owners of an elevator at Drake, N. D.

The Farmers' Elevator at Loomis, S. D., has been completed and is now in operation, in charge of Mr. Shirk.

A. A. Gad of Dazey, N. D., has sold his elevators at Stampede and Noonan, N. D., to the Sullivan Elevator Co.

The Burgess Elevator Co. has sold its plant at Munich, N. D., to the Farmers' Grain Co. of Minneapolis, Minn.

Evenson Bros. & Co., who own a 5,000-bushel flat-house at Kramer, N. D., intend erecting an elevator next year.

A deal has been closed whereby the Minnekota Elevator Co. has bought the T. T. Jacobson Elevator at Minot, N. D.

The D. S. B. Johnson Land Co. did not build its elevator at Litchville, N. D., this year, but may do so in the spring.

Winter & Ames have sold their elevator at Dunseith, N. D., to the Farmers' Grain Co., which was lately organized there.

L. U. Crill has sold his grain elevator and other property to the Farmers' Elevator Co. at Elk Point, S. D., for \$8,000.

A 50,000-bushel elevator has been erected by the Horn-Jensen-Nicoll Elevator Co. at McHenry, N. D. It is on the N. P. Ry.

William Staples has sold his 15,000-bushel elevator on the Great Northern at Absaraka, N. D., to the Absaraka Mercantile Co.

C. W. Derr of Mitchell, S. D., is building a line of elevators in the new towns of the South Dakota Central Railroad and has arranged to build three north of Arlington.

The Powers Elevator Co., of which E. E. Manning is agent at Edgeley, N. D., contemplate a new 70,000-bushel elevator next year. It will be on the Northern Pacific right-of-way.

A late deal conveys the North Dakota Realty & Investment Co.'s Elevator at Minnewaukon, N. D., over to the Farmers' Elevator Co. The new owners have enlarged the plant.

It is reported the La Moure Milling Co. of La Moure, N. D., will build a 40,000-bushel elevator at that place in the early spring. Two smaller ones will also be constructed in neighboring towns.

Articles of incorporation have been filed by the Miller Elevator Co. of Ambrose, N. D. The capital stock is \$10,000. The incorporators are Hugh Shaw, Archibald M. Shaw, James L. Miller and Archibald Miller.

Two elevators, one of 15,000 bushels' capacity and the other of 25,000 bushels' capacity, are being erected at Stark, S. D., a new town just recognized by the Northwestern Railroad. Stark is midway between Salem and Canova and is enjoying rapid growth. One of the elevators being built by Hoese, Lueth & Co. will have a 15,000-bushel capacity, and the Sun Prairie Grain & Feed Co.'s 25,000-bushel capacity.

Several elevator sites have just been granted at the new town of Kaylor, midway between the towns of Tripp and Scotland on the Sioux City & Dakota Division of the Milwaukee Railroad. Those who obtained sites are: Mike King, Sioux City, Ia.; Calron Elevator Co., Armour, S. D.; A. H. Betts, Mitchell, S. D.; A. A. Truax, Mitchell, S. D.; South Dakota Grain Co., Parkston, S. D.; Wait & Dana, Armour, S. D.; D. D. Wipf, secretary of state, Pierre, S. D.; Farmers' Elevator Co., Scotland, S. D.; Eli Thomas, Armour, S. D.; J. R. Jordan, Mitchell, S. D.; G. S. Smith, Farmer, S. D. It is

understood several of the structures will be started at once.

The Westhope Commercial Club of Westhope, N. D., has gone into the "scooping" business and in a letter to wholesale merchants and jobbers ask for help in an effort to secure cars and freeze the local men out of the market. The club declares the elevator men are asking wide margins and the farmers will not sell them their grain.

A number of new elevators are to be added to the line of the Lyons Elevator Co. of Minneapolis, Minn., which now operates 38 modern elevators of 40,000 bushels or more capacity in various parts of North Dakota. These are located along the Soo and the Northern Pacific. The company is a comparatively new one and is named after its president, H. R. Lyon of Mandan, N. D. S. L. Hegaard is vice-president and M. R. Daveney is secretary, while Frank Cousins of Carrington, N. D., is superintendent.

SOUTHERN AND SOUTHWESTERN.

J. R. Shaw & Co. of Jett, Ky., will install a Richardson Automatic Elevator in their plant.

Recently the Texas Fuel & Grain Co., Dallas, Texas, was dissolved and is now known as the Knippen Fuel Co.

A Richardson Automatic Scale to weigh screenings was recently sold the J. Allen Smith Grain Co. of Knoxville, Tenn.

E. T. Pauls, a grain dealer of Hooker, Okla., will build a commodious elevator at that place as soon as he can secure a railroad site.

The Mercantile Grain Co. of Houston, Texas, is erecting an elevator and warehouse, which will soon be ready for occupancy. The firm is expending about \$15,000 on the work.

The Richardson Scale Co. of New York has received an order for an Automatic Elevator Scale, with a capacity of 1,000 bushels per hour, to be installed by the Alabama Corn Mills Co. of Mobile, Ala.

Articles of incorporation have been granted the Asbury county Farmers' Union Warehouse Co. of Hamburg, Ark., which is capitalized at \$4,000. Those interested include R. C. Drew, H. C. White, E. G. Calloway and A. R. Goyne.

Articles of incorporation have been filed by the Ryman Warehouse & Elevator Co. of Nashville, Tenn. The firm is capitalized at \$5,000, which stock is held by F. J. Neville, B. L. Neville, T. S. Ryman, I. T. Rhea and W. D. Rhea.

A permit has been granted for the erection of the new \$14,000 grain elevator Fred Friedline of Chicago will build for Webb & Maury at Memphis, Tenn. It will be of cribbed construction and will occupy the site of the one recently burned.

MINNESOTA AND WISCONSIN.

There is a movement on foot to organize an elevator company at Gibbon, Minn.

The Minneapolis & Northern Grain Co. has closed its elevator at Argyle, Minn.

A. Speits and Theodore Speits of Albert Lea, Minn., are building an elevator at Hope, Minn.

Alfred Eklund and Louis Rice of St. Peter, Minn., are building an elevator at Arlington, S. D.

The Columbia Elevator at Hutchinson, Minn., has been closed for the season by August Nieno, the agent.

The Cargill Elevator Co. has applied to the Northern Pacific Railway Co. for an elevator site at Hazelton, Minn.

The Hubbard & Palmer Elevator at Truman, Minn., was reopened on December 2 with C. E. Eisenlaur in charge.

A grain drier is to be installed in Elevator "B." at Milwaukee, Wis. The elevator is owned by the Milwaukee railroad.

H. B. Bornemann of Hallock, Minn., has rented the Chatham Elevator at that place and is conducting a successful business.

Olof Pary, J. H. Muckala and others are interesting themselves in the organization of a farmers' elevator at New York Mills, Minn.

There is a movement on foot to secure a farmers' elevator for Battle Lake, Minn. The Farmers' Elevator there burned a year ago.

The Ormsby Farmers' Grain Co. has opened its new elevator at North Star, Minn., where grain is being received in large quantities.

During the financial flurry that struck the country a few weeks ago the elevators of the Hubbard & Palmer Co. in Minnesota were all kept open.

A Farmers' Elevator Co. is being organized at Arlington, Minn., for the purpose of building an elevator. The following men were elected temporary directors: Martin Nagel, Jacob

Schwartz, J. B. Jasken, Wm. Boyle, E. F. Sell, John Sullivan, Stephen Bade, Robert Weckworth and Richard Kistner.

A 15-horsepower Fairbanks, Morse & Co. engine has been installed in the mill elevator at New Richland, Minn. A new engine house was built to accommodate it.

Frank Grow of Hector, Minn., has applied to the Northern Pacific Railway Co. for permission to erect a 40,000-bushel elevator at Hazelton, Minn. It will be a building 34x34 feet in size.

The Hubbard & Palmer Elevator at Adrian, Minn., has been purchased by the Adrian Co-Operative Grain Co., an organization comprised entirely of farmers. The new company took possession on December 1.

The Heimark Moebeck Elevator Co. of Ulen, Minn., have placed an order with the Richardson Scale Co. for an Automatic Elevator Scale to handle 1,500 bushels of grain per hour. The Strong-Scott Manufacturing Co. placed the order.

The Case Elevator Co., of which Harry M. Case is the proprietor, has purchased and succeeded to the business of the Olsgard Elevator Co. Mr. Case was formerly a newspaper man at Albert Lea, but drifted into the grain business at McVile as manager for the Olsgard Elevator Co. By careful saving he managed to buy out the firm's interests at that place.

It is reported with reasonable assurance that the Great Northern and the Republic elevators, which were burned in the fire at Superior, Wis., a few weeks ago, will be rebuilt at once. It is understood that plans for rebuilding the Great Northern Elevator "A" and the powerhouse are already under way, and that arrangements for the repair of the Republic structure will be made at a meeting of the officers of the concern, to be held in the near future.

Practically all the insurance on the big elevator fire at Superior, Wis., has been adjusted. The loss on Great Northern Elevator A has been declared total at \$26,000. The loss on the A. D. Thompson grain is 50 per cent on \$750,000 insurance. The grain was greatly overinsured or the loss would have been almost total. The Republic mill and elevator loss was settled as total on \$120,000 of insurance. The loss on the Freeman and Minkota mills and elevators was \$750,000, with the insurance carried in the insurance fund of the Standard Milling Company.

OHIO, INDIANA AND MICHIGAN.

A new elevator is practically completed for G. G. Davis at Goldsmith, Ind.

Isaac Reed recently succeeded A. J. Hasler in the grain business at Argos, Ind.

H. G. Reed & Co., general merchant at Clymer, Ind., are building an elevator there.

G. S. Young has succeeded the grain firm of Hathaway & Young at Pewamo, Mich.

A. N. McNaughten has purchased F. C. Linville's grain elevator at New Salem, Ohio.

Everett Cope of Lewisville, Ind., has acquired the grain elevator and business at Dunseith, Ind.

It is reported an elevator will be erected at Arion, Mich., a town on the Michigan Central.

G. T. Burk of Decatur, Ind., is planning to move his elevator at Curryville over to Peterson, Ind.

Wooley & Hempey recently acquired the grain business of J. O. Belt & Son at Pickerington, Ohio.

An elevator is being erected by Pence & Goodwine at Stewart, Ind., a station on the C. I. & S. Ry.

The McWright Grain Co. offices at Two Harbors, Mich., are now operated by the Traders Grain Co.

The Curryville (Ind.) Elevator has been moved to Poneto, Ind. Curryville is reported as fast fading away.

The elevator formerly conducted by Tingley Bros. & Cummings at Era, Ohio, is now run by Looftbourrow & Morgan.

Sam Coil and Grant Stoughton have purchased the Tingley Bros. Elevator at Bookwalter, Ohio, and the building will be reopened.

A new elevator, in which many influential farmers are interested and which represents an investment of \$75,000, has been completed at Mt. Cory, Ohio.

The Skillin & Richards Manufacturing Co. is supplying the machinery for the 50,000-bushel addition to the Union Elevator Co.'s plant at New Richmond, Ind.

Frank Roots of Connersville, Ind., is preparing to construct an elevator on the site of the old Hydraulic Flour Mills. He is now having the canal at Milton, which has been dry for

several months, cleaned out and work on the building will be started at once.

Jones Bros. will have their new elevator at Aylesworth, Ind., equipped with the most modern machinery by the Skillin & Richards Manufacturing Co. of Chicago.

Abel Bros. of Cleveland, Ohio, has ordered an Automatic Elevator Scale having an hourly capacity of 1,000 bushels from the Richardson Scale Co. of New York.

Another elevator has been built at Riverdale, Mich. It is owned by Fred Strong and is of cement block construction. The plant was opened about the middle of November.

The Blish Milling Co. of Seymour, Ind., is building additional grain storage at their mill and rebuilding the old elevator. The John S. Metcalf Co. of Chicago is doing the work.

Articles of incorporation have been granted the Colling Elevator Co. of Colling, Mich., which will handle grain, beans, hay, etc. The capitalization is \$5,000, of which half has been paid in.

Crabbs, Reynolds & Co. of Riverside, Ind., are installing an Automatic Elevator Scale with a capacity of 10 bushels per discharge and have placed their order with the Richardson Scale Co. of New York.

Recently McCray, Morrison & Co. disposed of their interest in the Remington Grain Co. to J. A. Washburn and S. G. Hand, the resident members of the firm. The new proprietors will continue the business under the old name.

Fox & Hess of Coldwater, Ohio, have sold their elevator on the L. E. W. Railway to F. Hehmeyer & Son of Coldwater. The new proprietors will remodel the elevator into an up-to-date plant. Possession is given on January 1.

Jones Bros. are rebuilding their elevator at Aylesworth, Ind., which was destroyed by fire some weeks since. It is situated on the C. & E. I. and will have a capacity of 15,000 bushels of grain. This is the third plant the Jones Bros. have built.

WESTERN.

After having been closed temporarily the elevators and warehouses at Lewistown, Idaho, have resumed buying.

It is expected 1,500,000 bushels of wheat will have been received this season at Odessa, Wash., when the receipts are all in.

W. W. Robinson of Seattle, Wash., has ordered a Richardson Portable Bagging Scale to weigh 2½ bushels of grain per discharge.

An Elevator Scale with a capacity of 1,000 bushels per hour has been purchased by the Beal Grain Co. of Wenatchee, Wash., from the Richardson Scale Co.

The Richardson Scale Co. of New York has lately received an order for a 1,000-bushel Elevator Scale for the plant of the Salt Lake & Jordan Flour Mills at Salt Lake City, Utah.

Early in November the first wheat—eight carloads—was received at the new warehouse in Everett, Wash. A day or two later a vessel arrived to load for an Oriental voyage.

The Kettenbach Grain Co. and the Vollmer-Clearwater Grain Co. of Lewiston, Idaho, have withdrawn from the market with the statement that overflowing warehouses, shortage of cars and tightness of money demanded such action.

RAT STOPS ENGINE.

Rats and mice cause enough destruction and damage in what may be termed their legitimate way, but during the last week a lone rat in the Pierce grain elevator on the Ohio side has probably broken the record in the way of causing trouble, although it cost him his life. Over a week ago one day, the big, powerful engine "died" in that it came to a stop, and it absolutely refused to be started again. The engineer and mill men took her all apart, but though they know their business as well as any of them they failed to find any cause for the balk. An expert was then called in and he also could discover no reason for the stoppage.

A new engine might have had to be put in in the place of the "dead one" when the cause of the trouble was discovered by accident. A big rat was found in the exhaust valve. It is supposed that the rat ran under the engine and the suction of the exhaust valve pulled the rat up the pipe and tight up under the valve, shutting off all the air, so that the engine couldn't get its breath.—Union Mills (Ind.) Times.

New Orleans in November exported 1,010,000 bushels of wheat and 25,714:16 bushels of oats.

THE EXCHANGES

The Chicago Board of Trade is offering \$2,000 for memberships.

Architects are preparing plans for adding two stories to the building of the Duluth Board of Trade.

It is probable that the organization of a grain exchange at Sioux City, Iowa, will be effected at an early date. A committee of Sioux City business men will visit Omaha and confer with members of the Omaha Grain Exchange regarding the organization.

The Chicago Board of Trade has adopted a rule defining carload weights of grain and seeds as follows: Oats, 1,500 bushels; wheat, corn, rye and barley, 1,000 bushels; flaxseed, 600 bushels; timothy, Hungarian millet and clover, 36,000 pounds.

The annual statement of the Minneapolis Chamber of Commerce, issued by Secretary John G. McHugh, shows that during the past year the income was \$149,717.65. Of this amount \$139,078.21 was in the form of rentals from its two buildings. During the year \$70,000 of the indebtedness was cleared off.

Weighmaster Foss of the Chicago Board of Trade recently called his men together for one of the regular experience meetings which are held three or four times a year for the general good of the department. The directory of the Board of Trade attended the meeting and was pleased with the showing made.

At the meeting held in Washington on December 5 to consider the extension of foreign and domestic commerce the Chicago Board of Trade was represented by Secretary Geo. F. Stone and B. A. Eckhart. Representatives of twenty-three commercial bodies were in conference with the officials of the Department of Commerce and Labor.

The rules of the Chicago Board of Trade have been amended so as to make No. 3 white oats deliverable on contracts at a penalty of 5 cents. Oat traders now have new and old style contracts, and it is necessary for those sending orders to specify whether it is new or old style they wish to trade in. It will be assumed, unless specified, the trade will want new style.

The Pittsburg Grain and Flour Exchange recently passed a resolution requesting shippers to make all drafts to read "on arrival of car," and the amount not to exceed three-fourths of the value, less freight. At the same time the Exchange went on record as refusing absolutely to comply with the requests of some western shippers to pay drafts in currency through the express companies.

The amendment to the rules of the Milwaukee Chamber of Commerce which is intended to regulate the manner of settlement for shortages and excesses of grain in carload shipments has been adopted. The new rule provides that the market value of the grain on the day it arrives in Milwaukee shall be taken as the basis of settlement for all amounts over or under the supposed quantity in the cars.

King & Co. of Toledo say in a recent market report: "Contracts for corn futures here are all made in Three Yellow. Lower grades will not fill. Three Yellow grade requires that it shall be at least 90 per cent yellow; must be sound, reasonably dry and reasonably clean, and may be slightly mixed with unsound kernels. Purchases made on track bids can be filled by applying lower grades at the market difference upon arrival."

It is possible that the Cotton and Grain Exchange established by the Atlanta (Ga.) Chamber of Commerce about a year ago will be discontinued for lack of funds with which to operate. Less than half the money needed to run for another year has been subscribed, and if the entire amount is not raised soon the institution will be discontinued the first of the year. The Exchange has been of great benefit to the city, but the membership has not been as large as expected.

The Memphis Grain and Hay Association has secured new quarters and will operate a call board of its own instead of using that of the Merchants' Exchange, as in the past. It is declared that this action is due to a disagreement among the Memphis grain men. About three months ago several of the grain men who are members of the Merchants' Exchange and also of the Grain and Hay Association inaugurated a

call board of their own in the committee room of the Merchants' Exchange. Subsequently it was decided to secure new quarters.

J. F. Parker, first vice-president of the Kansas City Board of Trade, has resigned, and F. G. Cronwell, who was second vice-president, has succeeded him. F. E. Essex, a director, has been made second vice-president, and Geo. F. Carkner has been named as a director.

The directors of the Chicago Board of Trade on December 10 amended regulation 4 of the regulations of the Board of Trade Clearing House to read as follows: "All reports must be in the Clearing House by 11 a. m. of each business day, under penalty of a fine of \$5 if tardy, and the posting of the delinquent party on 'change' at noon, except on days when the exchange room is closed at 12 o'clock, when the names of delinquents shall be posted at 11:30 a. m. All reports deposited in the Clearing House after 11:05 a. m. shall be subject to an additional fine of \$1 for each five minutes (or part thereof) between 11:05 a. m. and the time at which they are deposited at the Clearing House."

The Grain Committee of the Little Rock Board of Trade has adopted the report of a committee composed of J. E. Greenfield, George Cunningham and A. J. Rauch, recommending that a system of official weights be adopted. It was decided to employ a chief weigher with deputies, whose duty it shall be to weigh all grain and commodity shipments and issue weight certificates. The Committee as a whole decided to install the system of uniform weights after a committee, composed of Dan Daniels and C. E. Smith, appointed to prepare new rules regulating the Little Rock grain market, had reported and advised that there be a confirmation of new rules as follows: That explanation of terms of shipment be made, specifying three days' time as "immediate shipment," five days as "quick shipment," and ten days as "prompt shipment;" that billing instructions be agreed upon, referring to matters of manner of shipment, demurrage, sale samples, who should load and unload cars, payment of telegrams, explanation of acceptances, meaning of regular market terms, etc.

PITTSBURG GRAIN MEN DINE.

The second annual banquet of the members of the Pittsburg Grain and Flour Exchange was held on the evening of November 21, covers being laid for 250. D. G. Stewart was toastmaster and was largely instrumental in making the affair a pronounced success. W. J. Brennen, former Postmaster John Francies of Allegheny and Louis W. Pratt, secretary of the Chamber of Commerce and Board of Trade of Tacoma, Wash., were the principal speakers. A reception preceded the dinner.

The banquet given last year was so highly successful and resulted in such good fellowship that it was decided to make it an annual event. The one just held was equally as delightful as its predecessor and the members of the Exchange are entitled to congratulate themselves on the outcome.

ANNUAL ELECTION AT OMAHA.

At the annual meeting of the Omaha Grain Exchange, held last month, the retiring directors, E. E. Bruce, A. C. Smith and A. L. Reed, were re-elected without opposition. At a subsequent meeting of the board of directors G. W. Wattles was re-elected president; E. E. Bruce, first vice-president; F. S. Cowgill, second vice-president; A. L. Reed, treasurer, and E. J. McVann, secretary.

The rules governing the inspection of provisions by the Chicago Board of Trade were adopted and members of the Exchange may now trade in provisions as well as in grain.

Another important rule has been adopted by the directors, to the effect all grain consigned to members must be offered for sale on the Exchange, under penalty of a fine. It is expected the rule will result in a larger amount of grain being offered for sale by samples at the Exchange each morning and an aid to enlarging the market. Some of the dealers have been overlooking the opportunity and failing to send up samples, simply accounting for the grain. For the first offense a member failing to offer grain for public sale will be fined \$10 and for each succeeding offense a fine of \$25 will be attached.

The Second Annual Corn Show of the Pennsylvania Live Stock Breeders' Association will be held at the Monongahela House, Pittsburg, on February 5 and 6, 1908. Prizes will be awarded for corn of different kinds and several cups will be awarded.

COMMISSION

J. C. Hellner, of the Southern Grain Co., Cincinnati, Ohio, and a member of the Chamber of Commerce, has engaged in business at Savannah, Ga.

It is rumored that Van Dusen-Harrington Co. of Minneapolis contemplates reopening its office in Milwaukee. The firm retired from Milwaukee two years ago.

T. E. Wells & Co., members of the Chicago Board of Trade, are reported to have curtailed their business somewhat, but will continue to act as grain receivers as in the past.

E. M. Higgins, until last February vice-president of the Armour Grain Co., has returned to the Chicago Board of Trade and has taken over the membership of his father, George W. Higgins, the oldest member of the Board.

Bernard Goldsmith, a former member of the Milwaukee Chamber of Commerce and now a resident of Berlin, Germany, has been nominated as a director of the American Association of Commerce and Trade in Berlin.

William S. Seaverns has made application to withdraw from the Chicago Board of Trade under the rules. He was president of the Board in 1889 and was one of the oldest members, having been active in the trade for over forty years.

E. G. Hadden, head of the grain commission and stock brokerage firm of E. G. Hadden Co., recently celebrated the twenty-fifth anniversary of his entrance on the floor of the Milwaukee Chamber of Commerce. Mr. Hadden, in the quarter of a century of his connection with the Chamber, has not lost a single day from the floor or his office when the Chamber has been open for business. He began on November 16, 1882, as assistant doorkeeper for Archie McFadyen, who has occupied that position for forty years. After two years in this position, Mr. Hadden became a full-fledged trader and has been active ever since.

WHEAT AREA GROWING.

The British Board of Agriculture, on December 3, issued a volume of statistics on wheat growing which shows that in one at least of the great wheat exporting countries the population appears to be overtaking the wheat acreage with considerable rapidity. It appears that during the last quarter of a century the population of the United States has increased thirty-four millions, or 68 per cent, while the wheat area has increased by less than ten million acres, or 25 per cent.

On the other hand, in Canada the increase of one and one-half millions of population, or 33 per cent, has been accompanied by an increase of nearly four million acres, or 158 per cent in wheat area. In Argentina an addition of 70 per cent to the population has been accompanied by an extension of the wheat area of from a little more than a half million to fourteen million acres. Summarizing the figures for these countries and adding Australia, the gains in the wheat area and population have been as follows within the last twenty-five years:

	Wheat Increase, Pop. Inc.	Million Acres. by Millions.
United States	9.6	34.0
Argentina	13.4	2.1
Australia	2.9	1.9
Canada	3.8	1.4

The net result is that on the whole the wheat area in thirteen European countries, the United States, Argentina, Canada and Australia has increased more rapidly than the population, and that whereas twenty-five years ago there were 283 wheat eaters there are now 264 for the same extent of wheat growing land. This result, however, is mainly attributable to Russia, Canada and Argentina, and in a slight degree to Hungary and Roumania.

The Associated Elevators at Buffalo have adopted the following rates: One-half cent per bushel for elevating, including ten days' storage. Storage thereafter one-quarter cent per bushel each ten days or part thereof until grain goes out. Special guaranteed winter storage rate of two cents per bushel till April 15 next may be had upon application. Heretofore grain going into storage at Buffalo after November 20 either had to be ordered out at once or take the regular winter storage rate of two cents per bushel, regardless of whether it stayed two weeks or five months.

COURT DECISIONS

[Prepared especially for the "American Elevator and Grain Trade" by J. L. Rosenberger, LL. B., of the Chicago Bar.]

Seed Lien.

Under the seed lien statute of North Dakota, the Supreme Court of that state holds, in Schlosser vs. Moores, 112 Northwestern Reporter, 78, that a person who in good faith furnishes seed grain to another is entitled to a lien for the entire purchase price of such seed upon the crop produced therefrom, whether all of such seed is sown or not. But whether, under the seed lien law of that state, a person furnishing two or more kinds of seed grain to another under one entire contract may perfect a lien which will be effective upon all the crops produced from the seed thus furnished for the entire purchase price thereof, was not determined.

The plaintiff in this case, under a verbal contract, sold and delivered 200 bushels of seed wheat at 75 cents per bushel and 60 bushels of seed flax at \$2 per bushel, and filed one lien statement for the total purchase price, claiming a lien indiscriminately upon the crops produced from such seed for the entire amount due him under the contract, but stating the number of bushels of each kind of grain and the price per bushel. It is held that the contract was not entire but was divisible, and that plaintiff's lien was therefore divisible and should be construed as two liens; one upon the wheat for the value of the wheat seed furnished, and the other upon the flax for the value of the flax seed furnished.

Elevator Company Not Taxable for Wheat

In the case of State vs. Northwestern Elevator Company, 112 Northwestern Reporter, 68, the Supreme Court of Minnesota says, the defendant owned a grain elevator at Minnesota Transfer, in which there were 30,000 bushels of wheat on May 1, 1905 and this was a proceeding to collect from it a personal property tax for that year, based on its alleged ownership of the wheat. The defense was that the defendant did not own the wheat, but was holding it in store for the owners thereof, to whom the defendant theretofore had issued its warehouse receipts, which were then outstanding. The court holds that the evidence was not sufficient to sustain a finding and decision that the defendant either owned the wheat, or so treated it that it was prevented, for the purpose of taxation, from denying that it owned it.

Warehouse receipts for grain stored in elevators, the court says, are symbols of the grain, and the title thereto passes by indorsement and delivery of the receipts; hence it is impracticable for the owner of an elevator to know who are the actual owners of wheat held in store by him on any particular day. It would seem that the most that the defendant could have done in this respect would have been to have furnished the assessor with the names of the original holders of all outstanding receipts. But, this aside, the fact remains that the agent or bailee is required by the statute to separately list in the name of his principal, not in his own, personal property in his possession or control. If he fails so to do there is no statute authorizing the assessor to assess it as the property of the agent or bailee in his name. This court is in entire sympathy with the suggestions of counsel for the state to the effect that this grain ought not to escape taxation; but unfortunately the Minnesota tax laws afford no practicable way whereby such a result can be prevented.

AN ARBITRATION APPEAL.

The following decision was rendered by the arbitration committee of the Grain Dealers' National Association on appeal from a decision by the arbitration committee of the Grain Dealers' Association of Oklahoma and Indian Territory on November 26, 1906, rendering an award of \$289.01 and costs of arbitration in favor of Robey Grain Co.

Smith Grain and Elevator Co., appellant, vs. Robey Grain Co., appellee.—The above award was appealed from by Smith Grain and Elevator Co. of Oklahoma City, Okla., who did not object to the point that there was a balance due the Robey Grain Co. of Oklahoma City, Okla., but they claim discounts as follows: On car M. K. & T. 14448, rejected wheat, discount 13 cents per bushel; on car M. K. & T. 30374, rejected wheat, discount 12 cents per bushel, were excessive, and

not in accordance with discounts and allowances as ruled in other markets at that time.

The contract shows that Galveston, Texas, was known as destination of shipment; therefore Galveston market conditions must be made basis of settlement. Other market conditions could not apply, as product was not there to have its benefit.

Discounts vary, and apparently so at Galveston; yet appellant fails to show how he has been injured by discounts charged. Quality of arrivals was not equal to grade contracted, yet they must apply on contract, as its shipment was intended on same.

Appellee is not responsible for any neglect of appellant in not forwarding quality that would not grade properly.

Failure to show where an injury has been done as to discounts charged made it necessary for us to try and obtain information as to the adjustments ruling at that time in Galveston, Texas. Evidence has been sought, yet such has been hard to obtain, as quality of grain cannot be shown. Reports as to discounts vary, it being from 5 to 16 cents per bushel on this grade of wheat, when applied on No. 2 Hard wheat contracts. We, therefore, must be guided by the decision of the arbitration committee, as they are acquainted with the quality and condition of the grain, and with the customs of that trade in their territory.

Our conclusion is that the decision of the arbitration committee of the Grain Dealers' Association of Oklahoma and Indian Territory be sustained, and that appellant pay this additional cost of arbitration.

(Signed)

ADOLPH GERSTENBERG,
WARREN T. McCRAY,
C. B. JENKINS,

Arbitration committee Grain Dealers' National Association.
Toledo, Ohio, October 5, 1907.

TEXAS ARBITRATION.

Following are two decisions by the Arbitration Committee of the Texas Grain Dealers' Association, rendered at Fort Worth on November 21, 1907:

Terminal Grain Co., plaintiff, vs. Howe Grain and Mer. Co., defendant.—The evidence submitted in this case shows that during a 'phone conversation between the parties, Howe Grain and Mer. Co. sold the Terminal Grain Co. 5,000 bushels three or better bulk mixed corn at 62 cents, which the seller confirmed, "basis f. o. b. points taking common point rate to Texas points, our certificate of weights and grade final," while the buyer's confirmation specified merely f. o. b. Howe, making no mention as to whose weights and grades were to govern settlement.

Immediately upon receipt of the Howe Grain and Mer. Co.'s confirmation, the Terminal Grain Co. wrote them as follows: "We have your confirmation of the 3d inst., and while your certificate of weights and grade will be satisfactory on shipments going to country points, we are compelled to sell in markets like Houston, Fort Worth and Galveston on destination weights and grade. Kindly advise if you will protect destination weights at such points. We also note that you stipulate f. o. h. points taking common point rate. Will this corn originate on any other line than the H. & T. C.? Our understanding was that it would originate at Howe."

In reply to this letter the Howe Grain & Mer. Co. wrote the Terminal Grain Co. as follows:

"Answering yours of the 4th, we do not care to sell otherwise than on our certificates of weights and grade unless to Galveston. We do not mean that we think all other dealers are dishonest, but have as much confidence in our scales and methods as we have in others. Regarding points of origin, we are shelling at three stations: Howe, Gunter and Farmersville on the M., K. & T. We understand your letter before us as refusing to confirm purchase on our terms, and we have, therefore, canceled the order. If, however, on receipt of this you are inclined to take the corn on our terms, will be glad to book, if have not made other sales in the meantime that would interfere. Please understand hereafter that we sell on our certified weights and grades, except when shipments are for Galveston."

On receipt of this letter the Terminal Grain Co. wrote the Howe Grain and Mer. Co. saying they could not understand how their previous letter could have been construed as a refusal to accept terms specified in their (Howe Grain and Mer. Co.'s) confirmation, stating further that their letter was merely an inquiry for further information that was necessary in order that they might handle the corn intelligently and to the best advantage

possible; and they went on to give the Howe Grain and Mer. Co. shipping instruction on all the corn bought.

On receipt of this letter the Howe Grain and Mer. Co. wrote the Terminal Grain Co.:

"As already advised, the sale has been canceled. Have nothing more to offer to-day," etc.

Whereupon the Terminal Grain Co. proceeded to buy the corn in for the seller's account at a loss of \$87.50, judgment for which amount they now ask be granted them.

The only question the committee sees in this case is whether or not the seller has the right, when confirmations are at variance, to decline to fill a sale according to the terms specified in his confirmation, without giving the buyer [chance] to accept the conditions and the terms he specifies.

Being clearly of the opinion that the seller has no such right, our verdict in this case is rendered in favor of the Terminal Grain Co. for the full amount of their claim, \$87.50, it appearing after careful investigation that the date of purchase and purchase price of this corn were such as to properly safeguard the interest of the seller.

It is, therefore, ordered that the defendant, the Howe Grain and Mer. Co., pay to the plaintiff, the Terminal Grain Co., at Fort Worth, Texas, the amount of this award in the sum of \$87.50; and the secretary is instructed to return to the plaintiff, the Terminal Grain Co., its deposit fee in this case.

Texas Grain and Elevator Co., plaintiff, vs. Sanger Grain Elevator Co., defendant.—In the above-styled cause, pending adjustment by the Arbitration Committee of the Texas Grain Dealers' Association, we, the said committee, find as follows:

This is a case in which plaintiff bought from defendant 2,000 bushels of soft No. 2 red wheat, 59-pound test, to be billed to mills in Texas, destination weights and grades to govern in settlement; and also bought two cars of chops of 400 sacks each, destination weights and grades to govern.

Plaintiff furnished defendant affidavits from mills at destination showing wheat tested 57 pounds and weighed out short of invoices, and made claim for shortage and also dockage 2 cents per bushel. Plaintiff submitted evidence that one car of chops checked out short at destination two sacks and the other car arrived heated and in bad condition, and was refused by parties to whom plaintiff had sold and was disposed of to highest bidder. Defendant paid plaintiff difference between price realized on car chops and their invoice, but declined to pay plaintiffs' claim for the profit on the original sale.

There having been about 30 days between the time of plaintiffs' purchase and sale and the market having advanced during that time, the committee decides that plaintiff is entitled to this advance in the market as evidenced by the sale. We, the committee, find for the plaintiff in the following sums: For dockage and shortage on wheat, \$44.31; for shortage on car chops, \$2.24; for misgrade on car chops, \$86.95; total, \$133.50.

It is therefore ordered that the defendant pay to the plaintiff, the Texas Grain and Elevator Co., at Fort Worth, Texas, the amount of this award, \$133.50; and the secretary is instructed to return to the plaintiff their deposit fee in this case.

J. P. HARRISON,
C. L. MOSS,
T. G. MOORE,
Committee.

Attest, H. B. Dorsey, Secy.

The farmer dictates the price of corn. Don't waste your time listening to the fellows who are doing all the yapping about four-cent hogs, but watch the primary movement. That will show you what disposition the farmer intends to make of his new crop—whether he will ship it freely and help the bears depress prices, or hold it until he can get his own price. You hear a lot or talk to the effect that the farmer will be forced to ship because there is no profit in feeding fifty-cent corn to four-cent hogs, but looking at the proposition in another light, isn't it absurd to suppose that hogs fed on fifty-cent corn will be marketed at four cents? Why should the farmer suffer the packers to deprive him of what is rightfully his, when he knows that by holding his hogs and cattle off the market he will in the end get his own prices? Why should the grower who in the last four years has won the admiration of all by the skillful and intelligent manner in which he has marketed his crops, now go back to methods pursued when the western farms were covered with mortgages?—E. W. Wagner.

IN THE COURTS

John Milk and Steel Bros. of Huron, S. D., applied to the state Railroad Commission to compel the Great Northern to give them a site at that place for elevators.

The Vile Grain & Hay Co. of Trenton, N. J., is principal creditor in the suit against Bessie Machinski of Jersey City, bankrupt. The firm claims a debt of \$1,292.52 for feed. The defendant is in the trucking business.

George W. and Brewster Conklin, hay and feed dealers in New York, N. Y., under the name of B. F. Conklin & Son, filed a petition in bankruptcy on November 20, showing liabilities of \$21,471.88 and assets of \$13,254.18, the latter including debts due on open accounts amounting to \$10,428.82.

A petition for writ of certiorari was filed in the Supreme Court at Washington, D. C., on November 11, by the Great Northern Railroad, for a review of the judgment of \$5,000 against it for rebates granted the N. P. Devereaux Co. of Minneapolis, Minn., on carloads of oats shipped to Seattle, Wash.

Conner vs. Douglas is the title of a case in the Bloomington, Ill., courts in which P. P. Conner of St. Louis seeks to recover \$832 damages because the defendant failed to keep his contract and deliver 10,000 bushels of corn. Douglas claims his corn would not grade high enough to comply with the contract.

By a decision of Judge Pollock of the District Court in session at Fargo, N. D., the verdict of \$5,000 in favor of the plaintiff in the case of Romstad vs. The Colgate Farmers' Elevator Co., as given by a lower court, was confirmed. Romstad alleged he had been injured while working in the plant, through the negligence of its owners.

The \$10,000 damage suit started by E. H. Bents against Wait & Dana at Armour, S. D., was dismissed in the Circuit Court at the recent term, the court holding there was no evidence to substantiate cause for action. Mr. Bents formerly bought grain for Wait & Dana at this place and contended that he was a third owner in their elevators.

In the case of the Rogers Grain Co. vs. Nathan Bailey, a jury at Clinton, Ill., decided, after an all-night session, in favor of the plaintiff. The company was suing on a breach of contract and was awarded \$1,370.90. The defendant had contracted to deliver corn at 35 cents and oats at 36 cents, but refused to keep his bargain when the price jumped.

Action has been commenced in the Superior Court at Cedar Rapids, Iowa, by the Northern Grain Co. of Cedar Rapids and Fairfax against Will Feyerabund for breach of contract. The petitioner states that some time in the summer, while the oats were still standing on the stalk in the field, it purchased from the defendant a 1,000 bushels of oats, 32 pounds to the bushel, at an agreed price of 31½ cents per bushel.

Thomas B. Hull was on November 23 appointed receiver for the Bay Grain & Flour Co. of Baltimore, Md., upon petition of V. W. Nicodemus and Edgar L. Grimes, trading as Nicodemus & Grimes. According to the petition, the Bay Grain and Flour Co. was organized with a capital stock of \$15,000, of which \$3,000 has been paid in. As a result of the demise of Henry C. Wright, president of the company, the petitioners allege the business of the concern is in bad shape, and a receiver was necessary for the protection of the creditors. The petitioners say about \$600 is due them.

The Farmers' Grain Co. of Haven, Kan., has instituted proceedings against the Mo. Pa. R. R., asking for \$65 damages, \$50 attorney fees and court costs. The petition alleges that the Missouri Pacific violated a statute of the state of Kansas, which requires railroad companies to furnish cars for the use of shippers upon due notice. The plaintiff company alleges that on September 26 it formally requested the Mo. Pa. R. R. Co. to furnish on the 28th of the same month a grain car at its elevator at Haven; and \$9, covering one-fourth of the cost of shipping a load of grain to Wichita, was paid to the carrier. The company did not furnish the car until October 2, four days later. On the same day a car was ordered to be ready for October 2, to ship a load to Conway Springs, \$10.50 being deposited as advance payment. This car appeared nine days after it was ordered. This so discommodated the company handling grain that it

brought suit in the court of Justice of the Peace William Astle at Haven, asking \$65 damages and the costs. Judgment was granted by default, and the case was appealed by the Railway Company to the District Court.

When the Empire Elevator Co. of Kansas City, Mo., appeared before the board of Railroad Commissioners last month to explain why it did not take out a license and become a public concern, it offered the plea that it was not doing a public elevator business. The company asserted it was only storing grain for one firm, the Waggoner-Gates Milling Co. At the time its elevator held 125,000 bushels of wheat and the ruling is that elevators of more than 50,000 bushels should be licensed as public elevators.

After an all-night session the Circuit Court jury having the case of T. P. Riddle vs. H. C. Crawford and G. A. Bailey in hand at Fort Wayne, Ind., returned a verdict for the plaintiff. The trouble arose over the fact that the contract was made with Crawford and Bailey to deliver hay to Mr. Riddle at a certain price, and that when the hay rose in price the defendants refused to deliver the hay. A number of points were involved in the case, and the fact of the verdict being conclusively for Mr. Riddle will probably have a distinct bearing on any future contracts of the same character which are made in this section.

Judge Hanford, of the Federal Court, in Seattle, Wash., issued an injunction on December 1, restraining the state Railroad Commission from enforcing its ruling which required the O. R. & N. Co., the N. P. and G. N. railroad companies to operate their railroads as connecting lines in hauling wheat from all loading places of the state to ports on Puget Sound. The court holds that the Commission's order is an attempt to encroach upon the power to regulate interstate commerce, and as it requires all cars of connecting lines to stand as common property it must have a tendency to restrain trade between the wheat districts and Portland.

A jury in the municipal courts of Chicago, Ill., on December 10, found for the defendant in the case of the Nash-Wright Commission Co. vs. Daniel C. Wright, a Board of Trade man. The proceedings were the result of alleged indebtedness to the amount of \$40,000, contracted by Wright with the Commission Company. Mr. Wright's defense was that the debt was incurred during a "gambling deal" in wheat. The money, he declared, was used in "wind sales" of wheat and could not be recovered. The company refused to admit carrying on illicit trades with Wright or any other broker, and contended that the debt was simply for money due on a stated account and a note amounting to \$10,000. Wright declared that of over 200,000,000 bushels dealt in by the option method not one bushel was delivered. It is probable the case will be appealed by the plaintiff.

Indictments were found on December 5 against George W. Wood, Lewin A. Wood, Lucian C. Wood, Forrest B. Wood, Charles T. Kelley and Paul Foss, alleged officers of the Wisconsin Grain & Stock Co., by a Federal grand jury in session at St. Paul, Minn. The charge is the misuse of the mails in furtherance of a scheme to defraud. The day following the indictments the prisoners were arraigned before Judge Page Morris and were represented by Judge Luce of Superior and former Governor John Lind. The defendants were released on bonds of \$1,500. Ashley Coffman, as the receiver of the Wisconsin Grain and Stock Co., insolvent, has sued out attachments in two suits brought in the District Court against George W. Wood and Lewin A. Wood. In each suit the plaintiff says he has a claim for \$50,000 against the defendant, on account of moneys had by the defendant and which belong to the estate.

"There was considerable surprise expressed about the courthouse at Cincinnati," says the Enquirer, "when an entry of dismissal was placed on record in the Superior Court in the suit of the German National Bank and the American Surety Company against W. J. O'Dell, Laura O'Dell, the O'Dell Company, the O'Dell Commission Company, the O'Dell Stock and Grain Company, J. O. Ballman, T. A. Dunlap, the Merchants' National Bank and the Fifth National Bank, to recover \$55,000, which it was alleged August Stecher, the former paying teller of the German National Bank, took from the bank and lost in speculation on margins. The banks were made parties to the suits as being the depositories in which the other defendants kept their money.

"The suit alleged that Stecher was employed by the German National Bank from 1903 until February, 1905, and that Stecher took the money and lost it during that period. The disappearance

of the \$55,000 from the bank caused a sensation at the time, and every effort to trace it seemed to avail nothing, until finally it was charged to Stecher, against whom nothing could be proved, however. The American Surety Company was on Stecher's bond for the sum of \$10,000, and it paid this amount over, and, therefore, became party plaintiff in the suit to recover the \$55,000, which it was alleged that Stecher took and lost.

"The case was one of the most mysterious in the police annals of Cincinnati. The entry of dismissal merely shows that it was dismissed without record at the cost of the defendants, and the attorneys refuse to give out any further information regarding the matter. It is understood that the action was taken in pursuance of a compromise, and that approximately \$40,000 was paid in settlement, which closes the incident in all its features."

C. H. Cooper of Council Bluffs, Iowa, has brought suit in the District Court against J. U. Reesy, the Rothchild Grain Co. and the Stühr-Reesy Grain Co., to compel performance of a contract alleged to have been made between him and Reesy. The plaintiff also asks \$2,000 liquidation damages for the alleged refusal of Reesy to carry out the terms of agreement. Cooper alleges that he made a contract whereby he was to turn over to Reesy 187 acres of land in Harrison County and \$977 in money, in exchange for two lots in Minden, the Stühr & Reesy grain elevator in Minden and 25 shares of stock in the Stühr-Reesy Grain Co. The transaction was to take place March 1, 1908, and was secured, it is alleged, by a forfeit of \$2,000. October 21 last, according to Cooper's allegations, Reesy served notice of refusal to carry out the contract. Cooper wants an order of court compelling Reesy to transfer the property. The Rothchild Grain Co. and the Stühr-Reesy Grain Co. are made parties to the suit because, it is alleged, part of the property involved stands in their names.

WHEN AN INTRASTATE ROAD IS SUBJECT TO FEDERAL CONTROL.

The Federal Circuit Court of Appeals decided at St. Louis, on November 30, that any railroad wholly within a state but carrying goods consigned from a point in another state is subject to the interstate commerce law and to regulation by the Interstate Commerce Commission. The decision is given in the test case of the United States vs. the Colorado & Northwestern Railroad Company, which operates a narrow-gauge railroad of forty miles in Boulder County, Colorado.

The government sued the railroad to recover penalties for failure to have air brake equipment on freight cars, which is required under the interstate commerce act. The Federal District Court of Colorado ordered the jury to bring in a verdict for the railroad. The Court of Appeals reversed the decision and ordered a new trial.

The majority opinion, written by Judge Walter H. Sanborn of St. Paul and concurred in by Judge Willis Van Deventer of Cheyenne, Wyo., says in part:

"Every part of every transportation of articles of commerce in a continuous passage from an inception in one state to a prescribed destination in another state is a transaction of interstate commerce. The rebilling practiced by railroads, without any new consent or contracts with the owners, could not destroy or affect the interstate character of the shipment or of the transportation. The constitution reserved to the nation the unlimited power to regulate interstate and foreign commerce, and if that paramount power cannot be effectually exercised without affecting intrastate commerce, then Congress may undoubtedly in that sense regulate intrastate commerce."

Judge John S. Phillips, in dissenting, stands strongly for states' rights, and says: "The philanthropic feature of this prosecution is but the rose in the mailed hand." He speaks of the inspectors of the Interstate Commerce Commission as having "discovered this inconsequential neighborhood road out in the mountains of Boulder County," and calls the majority opinion "advanced doctrine respecting the extension of Federal jurisdiction."

The first new corn of the season arrived in Baltimore on November 9, and was shown on the floor of the Chamber of Commerce by Messrs. Frame, Knight & Co. It came from the lower portion of the Eastern Shore of Maryland, but the condition was rather soft. The consignment, which consisted of 20 bushels, was bought by Messrs. C. S. Schermerhorn & Son for 60 cents a bushel. The first arrivals last year came on November 3. They consisted of 542 bushels of yellow corn and sold for 48 cents a bushel.

HAY AND STRAW

The editor of a local paper at Great Bend, Kan., is agitating for an alfalfa mill at that place.

Alfalfa hay has been exceedingly scarce around Tacoma, Wash., during the past month, due to a shortage in cars.

Emporia, Kan., is said to be an admirable location for an alfalfa mill. There is a good demand for the products.

Fire destroyed a warehouse containing four carloads of hay belonging to the Orrville Milling Co. at Shreve, Ohio, on November 28.

An ordinance has been passed by the city council of Oakland, Cal., restricting the storage of hay to 20 tons any one place within the fire limits.

Advices from Norton, Kan., are to the effect that only a small amount of stock remains to be disposed of before the new alfalfa mill company is launched.

A disastrous fire attacked the hay and grain storehouse belonging to George S. Wilcox, wholesale dealer at Providence, R. I., on November 20, and caused a loss of \$2,500.

The Brooks Wholesale Co. is contemplating the construction of an alfalfa mill at Fort Scott, Kan. El Dorado has also been given some consideration as a possible site for the mill.

The New York Hay Exchange will hold its annual dinner on December 28 at the Hotel Astor. George M. Dickerson, George E. Van Varst and F. Williams have the affair in charge.

A Mr. Hedges of Chase, Kan., has offered to put an alfalfa mill up at Hutchinson, Kan., providing 5,000 tons of alfalfa are guaranteed him each year. It is also considered possible the Larabeees might add an alfalfa mill to their new plant.

Dr. T. W. Orme, a live stock inspector who has been at Needles, Cal., lately, is reported to have come to the conclusion that grain dealers are doping their hay to make it weigh more, and as a result a number of horses have been poisoned and died.

Much interest is being shown by hay dealers in Florida, especially in the vicinity of Kissimmee, in the growing of bay. Soil prepared for this product is said to yield well, L. H. Ingram having secured about one ton to the acre, which is valued at about \$25 per ton.

The Pittsburg Hay and Grain Reporter of December 10, says: "The receipts of No. 1, also good No. 2, timothy are light, and all arrivals can be placed to advantage. Low-grade timothy, also low-grade mixed and clover hay are still very plentiful and are being sold at buyers' options."

The Alfalfa Meal & Milling Co. of Cherokee, Okla., is erecting a two and one-half story building, which will be 60x240 feet in dimensions. Necessary machinery has already been purchased for the plant as well as for a feed mill and grain elevator. L. E. Stone is president of the corporation and L. L. Wiles is secretary.

C. Beaman Smith of Washington, D. C., where he is an assistant in the Agricultural Department, recently urged the farmers of Wadena County, Minn., to raise clover. The soil of that section is similar to that of the northern part of the southern peninsula of Michigan, where from 8 to 10 bushels of seed per acre is raised.

"Colonel," said the reporter, "I am told that you once made a fortune in bay. Would you mind telling me the story?" "The only foundation for the story, suh," responded Colonel Hanktunder, "is that I married a rich grass widow some years ago, and I can lick the man that sent you to ask me that question, begad, suh!"—Chicago Tribune.

Labor Commissioner Ryder of Nebraska has lately given out a statement showing that the state is wealthier than last year because of her increase in alfalfa acreage. He asserts western Nebraska has been rejuvenated by the alfalfa plant. The sandy soils permit the roots to dig deep into the hills and valleys, producing a wealth of feed and enriching the soil. "Running well over the mark of \$11,500,000, the value of the alfalfa raised in 1907 shows pretty conclusively that the farmers of Nebraska are fully awake to the importance of this great fodder crop," said the Commissioner. "The figures of the state production of alfalfa have just been completed, and give a total production of 1,450,759 tons. Figured at a very conservative valuation, this is worth \$11,606,072." The total acreage was reported as

455,592, and the average yield is 3.16 tons per acre, which Mr. Ryder insists is away within the facts, and reports from other sources bear out his judgment.

The deliveries of hay during the past week, both in the country and the city, have been more liberal, but still scarcely sufficient for local requirements, especially as regards the better qualities, sales of car lots of No. 2 on track being reported at \$17.00 to \$18.00, the latter figure for choice. No. 1 is very scarce and \$19.00 could easily be had for car lots. There is scarcely anything doing for export, although it is said Glasgow would take a few lots at 105s c. i. f. if freight could be had. The situation is a very peculiar one, as shipments continue to be made to districts west that last year sent considerable hay to this market; and we hear that on the south side of the river as far as Huntingdon quite a lot of hay is now wanted. Lachute district is shipping out hay, but it is not coming to Montreal, as it is wanted for the Brockville and other districts west. A lot of 447 bales was shipped to London on the SS. Montezena, said to be on a very reasonable freight rate. From present appearances we are not likely to see much lower prices between now and the next crop.—Montreal Trade Bulletin.

The Government has purchased 3,000 tons of wheat hay from the Yakima Indian Reservation for use in the state of Washington. The remainder of its supply for this state includes 5,000 tons of timothy from San Francisco markets and 3,000 tons of the Washington product. Wheat hay, however, is rapidly coming into favor, and recent advices from Seattle, Wash., say: Fully 10,000 tons are now stacked within the city limits, mostly crowded close to the railroad, where it is accessible to cars. Five large companies are operating here and have purchased from the farmers upward of \$150,000 worth of hay so far this season. As much of this as cars could be obtained for has been shipped. Thousands of tons of wild hay have been cut this year from the meadows along Toppenish Creek. This has readily sold for from \$9 to \$11. Alfalfa is the next greatest production in the hay line, it having sold from \$8 to \$11, while the wheat hay comes third in production and has brought from \$9 to \$12. Many of the farmers ship their own hay in carload lots to Seattle, but most of it is disposed of through the five large shipping concerns located here.

The receipts of hay, while lighter than for this time last year, are moderately in supply and fill the needs of the trade at present. Not quite enough of the best timothy hay offered to fill the demand. Conditions financially are some better, with business being transacted with a good deal of caution. For these reasons there will not be much further change in prices. Altogether present prices are not below what they should be, especially when it is remembered that \$15 in Pittsburg is a good price under ordinary conditions for good No. 1 timothy hay during most seasons. The demand for clover and clover mixed is about what could be expected at this time of the year. Improvement may be fairly expected when the weather becomes colder, which it may do now at any time. Prairie hay is still moving at quotations, with no urgent demand. While the above conditions may not be exactly what our shippers expected when they contracted the bulk of the present crop, they may still congratulate themselves that they are as good as they are, and that the prospect for conditions to improve in the near future are as good as they are.—Pittsburgh Hay Reporter, December 6.

R. E. Smith of Sherman, Texas, who is recognized by many as the "alfalfa king," possesses 1,400 acres of alfalfa, from which he harvests about four crops of hay and one crop of seed each year. Sometimes he secures an additional crop. Mr. Smith secures an annual income of more than \$100,000 from his alfalfa and a little bit more from the hogs and cattle he feeds on alfalfa. Mr. Smith is one of the greatest experts on growing alfalfa in the United States. He has taken the pains to trace the history of alfalfa back to its earliest origin. He found that it entered the United States by way of Mexico. It was brought to the latter country by the Spaniards soon after the days of the conquest by Cortez. It spread northward to the Rio Grande Valley, where it was grown by the Mexicans in irrigated lands two or three centuries ago. From Mexico the plant spread southward and was grown in Central and South America as far back as 250 years ago. It is still growing extensively in Chili and several of the other far southern countries. The native home of alfalfa is said to be central Asia. It is now spread pretty well all over the world and of

recent years it became the principal forage crop in some sections of the United States.

As the result of a hearing recently given a shipper by the Interstate Commerce Commission a decision has been made involving important reductions in the weight of hay shipments. It has been customary for the roads to fix minimum carload weights so high that it was physically impossible to get the minimum amount into a car, and so the less than carload rate must be paid. In a case from Ledyard, Iowa, against the North-Western and Omaha roads, involving shipments to Minneapolis, the Commission fixed these minimums as reasonable for cars of sizes indicated: For cars of thirty-four feet length and less, 15,000 pounds; for cars over thirty-four feet, 20,000 pounds.

MEASURING HAY.

The following is my way and I think it is not far from right: Measure the distance over the stack, multiply one-third of this by itself and the product by one-fourth of the distance around the stack at the base. This gives the number of cubic feet in the stack. Divide this by 421, the number of cubic feet in a ton.

Example: Suppose a stack measures 15 feet from the bottom to the middle of the top. This would mean that it measured 30 feet over. One-third of this is 10 and this multiplied by itself equals 100. Then suppose the stack was 40 feet around at the base. One-fourth of this is 10, and 100 times ten is 1,000. Divide this by 421 and you have 2.35, the number of tons in the stack, a trifle more than two and a third tons.

The kind of hay will determine whether this rule will hold true. If the hay was put up after it had become well matured, it will take more of it to weigh a ton than if the hay had been stacked when it was at the proper stage. No rule will hold good under all circumstances.—E. M. Bailey.

MINIMUM WEIGHTS ON HAY.

The Interstate Commerce Commission has announced its decision in the case of Wiemer & Rich vs. the Chicago & North-Western Railway et al. Plaintiffs are hay shippers at Ledyard, Iowa. They complained of the minimum carload rule of the railway on business to Minneapolis. The Commission's brief of the case, in the report and order given by Commissioner Clements, follows:

"1. Minimum weights applying on shipments of hay, Ledyard, Iowa, to Minneapolis, Minn., are, for cars 30 feet and under, 16,000 pounds; cars over 30 feet to and including 32 feet, 18,000; cars over 32 feet to and including 34 feet, 19,000; cars over 34 feet and less than 36 feet, 20,000, and for cars 36 feet and over, 22,000 pounds. Ledyard, Iowa, to Pekin, Ill., cars 34 feet in length and under, 15,000 pounds; over 34 feet, 20,000 pounds. From Ledyard and other northern Iowa points to Chicago, the minimum weight for cars 34 feet and under is 15,000 pounds; for cars over 34 feet, 20,000 pounds: Held, That defendant's rules and regulations, fixing minimum weights on baled hay, Ledyard to Pekin, are not unreasonable or unjust. Held further, That the rules and regulations at present enforced by defendant companies governing carload minimums applicable to shipments of hay from Ledyard, Iowa, to Minneapolis, Minn., are unreasonable and unjust; that the rules and regulations applicable to such shipments from Ledyard to Chicago are reasonable and just and should be applied to shipments destined to Minneapolis.

"2. It is not reasonable that carriers unable to supply shippers with sufficient cars of large or average capacity should make such minimum loading requirements as cannot be practically complied with as to the smaller cars in order that they may obtain as much earnings from shipments therein as from those in the larger and superior cars."

Discussion of the Case.

Commissioner Clements' report contains the following discussion of the case:

"Complainants shipped 163 cars during the season of 1905-6—that is, from the latter part of September, 1905, to June 1, 1906. Of this number, 142 were less than 34 feet in length, of which 87 were loaded to exceed the minimum of 19,000 pounds and the remaining 55 were loaded below the minimum. The excess weight loaded in the 87 cars varied from 135 to 6,260 pounds. Of those loaded below the minimum, the deficit varied from 50 to 4,260 pounds.

"Complainants' foreman, who had served in that capacity for four years, testified that it was not possible to load the prescribed minimum weights in the smaller cars furnished by the Chi-

cago & North-Western Railway Company; that on account of expansion after it leaves the chamber, the bale will occupy more space than 14 by 18 by 42 inches, but the record does not disclose what allowance in the width, height, or length of the car should be made for this expansion. * * *

"Defendants' counsel contend that the revenue derived from a carload of hay was not a fair return for the service performed, and if the minimum were reduced the rate would have to be advanced proportionally. In a statement filed by the defendants, the relative revenue derived from cars carrying different commodities is shown as follows:

On a 34-foot car of hay.....\$31.56
On a 30,000-pound car of cement..... 37.56
On a 24,000-pound car of lime..... 34.45
On a 40,000-pound car of salt..... 45.76
On a 30,000-pound car of potatoes..... 62.02
On a 24,000-pound car of lumber..... 41.52
On a 30,000-pound car of iron and steel articles 59.28

"However, this case involves only the reasonableness of the minimum loading rules and not that of the rates independently considered.

"Defendants also asserted that cars loaded with hay were detained for unloading at destination for a much longer period than cars loaded with other commodities. The average time consumed in unloading 161 cars of hay at Chicago was seven days. The free time allowed for unloading is four days, and, of course, demurrage would accrue for the extra three days. The average detention for 75 cars of grain was 4 days, and 113 cars of ice averaged 4 days; 191 cars of merchandise, 1 day; 131 miscellaneous cars, 4 days. The average of the total of 676 cars was 4 days. It will therefore be seen that, if these figures are approximately correct, the carrier is without the use of the car containing hay three days longer than when used in the transportation of the average commodity. Whether the demurrage charge of one dollar per day is adequate compensation for detention of the car is not disclosed by the record in this case. In any event, those shippers or consignees who promptly unload the cars should not be penalized on account of the default of those who do not, whether such default result from neglect or acquiescence of the carriers, or otherwise."—Traffic Bulletin.

AUSTRALIAN RYE GRASS.

Australian rye grass is being successfully cultivated in the river bottom lands of the Sacramento, near Chico, Cal. It is a splendid stock food and was just introduced into California by the late Gen. John Bidwell, many years ago. J. H. Jones, an agriculturist of Chico, describes the product as a perennial grass, thriving year after year without cultivation or replanting. Especially is it adapted to low, swampy ground.

It begins to grow in May and continues until late in the summer, or when the moisture begins to leave the soil. It can be repeatedly cut for hay and fed off to stock during the growing season, and this serves to increase its growth, similar to alfalfa.

Unlike alfalfa, however, it is not affected by rodents, and grows on land not otherwise suitable—namely, low river bottom or swamp land, of which there are thousands of acres along the rivers of northern California.

When cut for hay it is an excellent food, superior to cereal hay, which is commonly used in this country. It is little known as a feed, being confined principally to this locality, but is destined to become a very valuable product in the feed line, and a means of revenue from lands otherwise of little value.

Its average height is twelve inches, and two crops of hay can be cut on the lowest and wettest ground. If this land could be flooded during the late summer a third crop could easily be obtained.

The grass was originally planted immediately south of Nord, Butte County, and for years has been seeding itself by the flood waters which carry it to all the low lands, of which it is rapidly taking possession. The Bidwell estate this season is haling the grass for hay and feeding it to the stock on the estate.

G. C. Hinshaw has harvested the first rice planted in the Sacramento Valley. There were 50 acres, planted very late in the season, and not enough rain fell to germinate the seed, which lay dormant until early in July, when the land was flooded from the canal. It then made a splendid growth, and Mr. Hinshaw estimates a yield of two thousand pounds to the acre. It has proved conclusively that rice-growing in the Sacramento Valley is a success, and it may be expected that others will take up the culture of this profitable cereal.

SEEDS

The stockholders of the Thompson Seed Co. of Albert Lea, Minn., decided on December 4 to ask the courts for the appointment of a receiver and have recommended C. L. Hill, one of the heaviest stockholders, for the position.

Articles of incorporation have been filed by the National Seed Co. of Chicago, Ill., which is capitalized at \$5,000. The company proposes to deal in grain. Those who own the stock are C. C. Carahan, A. M. Cox and M. Slusser.

Preparations are being made for the second annual convention of the Colorado Seed Growers' Association at Denver on January 23, 1908. Former Senator T. M. Patterson, who has offered several handsome prizes for the best seeds raised by boys and girls, will give an address. Last year \$400 in prizes were distributed.

Representative Mann of Illinois will seek to have Congress prescribe rules and regulations along the lines of the pure food law that farmers and others may not be defrauded through the delivery of adulterated seeds. He will offer a resolution appointing the commission to prepare a plan for the apportionment of offices in the new building at Washington.

J. W. Ratekin, proprietor of the Ratekin Seed House at Shenandoah, Iowa, started the season's work late last month and besides the regular help has an additional force of 50 or 75 men. Mr. Ratekin has big orders on his hooks for his seed corn, more than for any one year before. Last year he shipped an average of two cars a day throughout the month of January, as well as several in February.

From remarks made by Prof. M. L. Mosher of the Iowa State College at Ames, Iowa, it is deduced that the seed corn will be scarce in that state next spring. This is because we had about the hardest early freezes ever known and because the seed, being softer and having more moisture than usual, was peculiarly liable to damage from that cause. Professor Mosher is distributing samples of Silver King seed corn, which he considers the best to plant in northern Iowa.

In a recent interview C. Beaman Smith, an assistant in the Department of Agriculture at Washington, said: "The flower midge is probably the most important factor in determining the yield of clover seed. Few of your farmers will know anything of this little insect, but it is here, as it is wherever clover is grown. This flower midge attacks the clover when it is in bloom. It then goes into the ground and spins a cocoon around itself, and after a period it reappears, generally when the clover which has been cut for a hay crop is in bloom a second time. This insect preys on the flower and destroys it, and thus there is no seed."

A payment of \$4,951.50, being the first on seed grain loans amounting to \$7,780.80 made by the state of Minnesota in Norman County, was made on December 2. Similar loans were made in Clay and Wilkin counties, but none of this money has been repaid yet. The act authorizing these loans appropriated \$25,000 or so much thereof as might be necessary for the purpose of purchasing seed grain for farmers whose crops were destroyed in whole or in part by excessive rainfall in the years 1905 and 1906. The law made it a misdemeanor for any farmer to dispose of any of the crop raised from the seed grain so procured without first repaying his loan to the county. It also provided that in case the crop this year should be a failure, the amount of the loan should be levied as a personal tax in the next assessment of taxes, after November 15, 1907, and be collected the same as other personal taxes, except that there should be no exemption from this tax.

The Daily Commercial Record of Duluth estimates the flax crop for market in Minnesota and the Dakotas as being one and one-fourth to one and a half million bushels, making a total of 28½ to 28¾ million bushels. This is given on November 30, as a very conservative estimate. Commenting on the above, the paper says: "It is worthy of note that this crop was fully thirty days later than the average in moving into the accustomed channels of trade, and for that reason the current year of consumption may be short one month; or in other words, our old supply of seed carried us into the present year fully thirty days. Our exports for this crop will be very close to 2½ millions, leaving, on our estimate, about 26 millions for domestic consumption, an amount sufficient for all purposes, in our opinion, especially if adverse conditions of business continue. It appears to us that our future price, in view of the above situation, will depend largely on the European situation in

the spring months, and another thirty days must elapse before that situation will develop with sufficient clearness to warrant a forecast of prices abroad."

SEEDS IN EUROPE.

London Corn Circular, the leading English authority on seeds, says: "It is seldom we have so interesting a season so early in the year. In a general way we are in for high prices, and this combined with every prospect of dear money. After the exuberant crop of English red last year, it is curious to note the complete change of scene this season. A few parcels of maiden seed are saved, along with still fewer lucky parcels of ordinary, but the bulk of the crop may be said to be ruined by the relentless rain coming at the critical time. With a fine October an even more gigantic crop than last year would have been saved; but many a farmer has made his first, and probably his last, attempt at saving his clover for seed. The United Kingdom will require to look elsewhere for its clover requirements this year. Fortunately, Chili comes to the rescue, as usual, and a fine crop is being handsomely paid for as it comes along. Russia and Hungary have also fine crops, which should go far to fill up the gap, but prices should easily maintain their present level, as Germany's crop shows mixed qualities. France and Italy have none to spare, and last, but not least, both America and Canada present every appearance of being importers instead of exporters. Canada has a fine crop of alsike, but as America has practically none, and Germany shows poor qualities, Canadian prices have rushed up. This is natural, as apparently they must supply the greater part of the demand from everywhere. New samples of whites are not 'taking,' the hulk showing weather. Fortunately, magnificent qualities were held over, and these are being absorbed first in preference to the new. Trefoil is a small crop of English, but quality is good, while foreign is a poor crop of unattractive appearance. Higher prices for both are probable when the demand comes along. Timothy is an ordinary crop of similar quality—present prices seem reasonable."

BUFFALO'S GRAIN TRADE.

The receipts of flour and grain by lake from the opening of navigation to November 30, 1907, and same period of 1906, were as follows:

	1907.	1906.
Flour, hhls.	9,502,508	9,107,253
Wheat, bu.	54,918,422	43,332,232
Corn, bu.	28,494,436	25,545,828
Oats, bu.	9,988,716	22,192,855
Barley, bu.	10,131,736	10,761,620
Rye, bu.	1,158,134	1,181,640

Total, bu. 104,691,444 103,014,175

For the year 1907 and previous 20 years the receipts of grain in bushels at Buffalo, from opening of season to November 30, were as follows:

1907	104,691,444
1906	103,014,175
1905	98,397,812
1904	75,187,631
1903	118,278,779
1902	103,783,690
1901	110,441,745
1900	141,998,917
1899	135,548,979
1898	193,778,965
1897	182,360,230
1896	154,411,742
1895	105,634,615
1894	95,432,652
1893	129,443,913
1892	128,489,752
1891	122,535,580
1890	87,029,244
1889	88,527,557
1888	72,501,980
1887	82,999,647
1886	71,403,223
1885	48,909,371
1884	55,455,299
1883	65,331,567
1882	48,546,943
1881	56,229,942
1880	104,726,335
1879	72,602,893
1878	76,929,435
1877	60,523,853

Year ago the corn bulls indulged in extravagant talk about the great demand there would be for corn to make denatured alcohol. Internal Revenue Department shows that not a single farm distillery or small producer has embarked in the business.—King & Co.

OBITUARY

Albert M. Withington, a grain and produce dealer, died late in November at his home in Springwater, Cattaraugus County, N. Y. He was 82 years of age.

John Swedburg, an employe in the Great Northern Elevator "A," which burned at Superior, Wis., early in November, is reported to have lost his life in the flames. No trace has been found of his body.

Robert F. Coates, 52 years old, for the past eight years engaged in the grain business at Wichita, Kan., died on December 1 at his home in that place. His obituary will be found elsewhere in this issue.

William Kirkwood, one of the oldest members of the Chicago Board of Trade, died on November 16 at Musselburgh, Scotland. He retired from business about ten years ago, after having been in the trade more than forty years.

Granville S. Harrell, aged 83 years, died during November at his home in Fairland, Ind., where for 20 years he was engaged in the grain business. Mr. Harrell was a native of Virginia. He is survived by his wife, four daughters and a son.

C. E. Bennett, for many years one of the most prominent grain dealers in the Northwest, died at La Crosse, Wis., on November 20, aged 65 years. Deceased until two years ago was a partner in the S. Y. Hyde Elevator Co., which did an extensive business in Wisconsin, Minnesota and the Dakotas.

Charles Clifton Benedict, son of Harry W. Benedict, a prominent grain and hay merchant of New Orleans, La., died on November 20 from a complication of diseases. Mr. Benedict first became ill at his sister's debut party a week before, but rapidly grew worse. The deceased was 25 years of age and a native of this city. He attended the public and high schools until several years ago, when he took a position in his father's firm as a hay weigher and inspector. Mr. Benedict had many friends in his home city and his sudden demise is greatly mourned.

Erastus Bostwick Baldwin, who became a member of the Chicago Board of Trade in 1863, the year he moved to Chicago from New England, died suddenly of heart failure on November 30, aged 80 years and 4 months. As had been his usual custom, he arose and dressed in the morning, but complained of a slight pain in his side. Half an hour later he was found sitting on a sofa in his room, dead. In his hands was a copy of his morning paper. Mr. Baldwin was not only one of the oldest members of the Board of Trade, but also was among the most active. His opinions were treated with much deference by all who knew him.

Charles E. Gifford, for more than half a century prominent as a dealer in grain and flour, died on December 9, at his residence in Chicago. Deceased was born 80 years ago in Troy, N. Y. He started in the grain business at Albany, N. Y., where he resided for 20 years, before moving to Chicago. Since then he has been engaged in business and has been active as a member of the Board of Trade. He founded the firm of Charles E. Gifford & Co., which of late has been conducted by his two sons, I. C. Gifford and C. E. Gifford, Jr. Mr. Gifford's death was due to heart failure induced by an attack of bronchial pneumonia from which he had been ill a week prior to his demise.

Richard B. Clark, head of the grain firm of Thomas S. Clark & Sons at Baltimore, Md., died suddenly of apoplexy last November while being taken from his office to a hospital. Mr. Clark was 58 years old and was a native of Baltimore. He had been identified with the grain trade since his youth, and at the death of his father, Thomas S. Clark, became the senior member of the firm. The records show he was one of the oldest members of the Chamber of Commerce and at one time was a director. As soon as Mr. Clark died the officers of the Chamber of Commerce were notified and the flag on the building was placed at half mast. Mr. Clark had been in poor health for several months. He never gave up active business, however, though his visits to his office had not been regular of late. Neither his friends nor his family, however, anticipated such a sudden ending, and his death cast a gloom over the business community with which he had been so long identified. He was a graduate of the Baltimore City College and was prominent in church work. He was a large owner of Baltimore real estate. His brother, James A. Clark,

is the only surviving member of the firm. Besides him the widow, two daughters and a son mourn his loss.

Jerome Werdeu, manager of the Monarch Elevator at Brainerd, Minn., committed suicide by shooting himself twice in the head while in his office. A note left by him reads as follows: "I was a fool and spent my money like a fool, and am killed like a fool." Mr. Werdeu left no irregularities in his accounts, though he is said to have been drinking heavily. On November 28, the night preceding the act, he attended a charity ball. Deceased was a resident of Glenwood, Minn., where his parents reside. He had been in charge of the elevator at Brainerd for about six weeks.

Captain John W. Smith, aged 79 years, one of the oldest grain men in or about Stockton, Cal., died on November 26. He is mourned by his widow and two daughters. Capt. Smith retired from business a year ago, owing to impoverished health. At that time he was agent for George W. McNear & Co. at Stockton. Deceased has resided in Stockton since its early days. Three years ago the deceased was seriously injured in a bicycle collision, fracturing the bones of one of his limbs near the hip joint. The shock affected his heart, and owing to advanced age the accident hastened his demise. The deceased was the builder and principal owner of the first street car line ever constructed in Stockton.

Henry C. Wright, president of the Bay Grain and Flour Co. of Baltimore, shot himself through the head the night of November 18 while at his suburban home near Catonsville. His body was found the next morning in the stable by one of his servants. It is said he had been worrying of late because of his inability to raise money for a building operation he had undertaken. A friend says Mr. Wright had tried to get \$2,500 on his home property, but did not succeed. Mr. Wright was 60 years of age and was born in Dorchester County, Md. He came to Baltimore when quite young and had for twenty years been engaged in the grain and flour business. He is survived by a widow and two sons. Mr. Wright was a member of the Baltimore Chamber of Commerce.

Adam Diehl, aged 71 years, who recently died very suddenly of heart failure, was perhaps one of the best known grain merchants and feed dealers about Pittsburg, Pa. Mr. Diehl died during the night and very strangely. It appears that his wife dreamed that he was dead. She awoke with a start in the middle of the night to find her dream was only too true, for beside her lay her husband, cold in death. With a scream of horror she fell in a swoon upon the floor where the members of her family found her a moment later. For more than 25 years Mr. Diehl conducted his grain and feed business in Pittsburg. He turned it over to his two sons, George and Louis Diehl, several years ago. He had always enjoyed good health, and retired the night of his demise feeling in his usual good spirits. Mr. Diehl belonged to several fraternal organizations and was treasurer of the Birmingham Fire Insurance Company. He is survived by his widow, two sons and three daughters.

James Callahan, one of the oldest and most prominent men of Louisville, Ky., where for years he conducted a grain elevator and feed mill, passed away on November 12 at his beautiful country home on the Upper River road. Death was not unexpected, as Mr. Callahan had long been ailing from a complication of diseases. Deceased was 84 years old and a native of Clarksville, Ind. When a youth his father died and he went to Louisville with his mother, where he was afterward identified with grain and milling interests. Mr. Callahan only recently celebrated with his wife the sixty-second anniversary of their marriage, at which time their family of nine children joined in with the merrymaking. Mr. Callahan established a large feed mill at Ninth Street and Broadway after his marriage. Until the completion of the Louisville & Nashville Railroad he conducted a wagon yard also at the same place, which afterward became a depot for the wagon trains that ran over the turnpike from Louisville to Nashville. After the completion of the railroad the business became unprofitable and he gave it up. Mr. Callahan founded the large grain elevator at Thirteenth and Lexington streets, and since that time, although his sons were in partnership with him, had always held the reins of supervision. One of Mr. Callahan's achievements was the building of the narrow gauge road from Louisville to Prospect. The only ambition Mr. Callahan left unrealized was the building of a canal around Louisville from the Cut-off to the mouth of Paddy's Run. Mr. Callahan was never able to interest capitalists sufficiently to carry out the project. He claimed that the canal would have made Louisville one of the

greatest manufacturing cities in the United States, as the canal would have furnished water power enough to operate factories for seven miles on each side of its entire course.

A. P. Hill, one of the most prominent grain men in Macon County, Illinois, was killed on the night of December 5, by a Wabash freight train. The accident occurred about half-way between Blue Mound and Stonington. Deceased was a member of the firm of E. W. Crow & Co., of Blue Mound, and of Hill Bros., owners of elevators at Stonington, Wileys and Raymond. Mr. Hill resided at Blue Mound, but on the afternoon of the fifth had gone to Stonington on business, and, as he frequently did, started to walk back to his home, a distance of six miles. He left Stonington at 5 o'clock and when at 10 o'clock he had not reached home, his sister started a posse out in search of him. His body was found beside the track, with his neck broken and a leg crushed. It is supposed he was struck by a freight train which left Stonington about half an hour after he departed. Deceased was about 55 years old, unmarried, and is survived by his sister, Mary, and invalid brother, Moses.

James M. Whitney, a well-known grain man of Rochester, N. Y., died at his home on November 23, aged 64 years. Mr. Whitney formerly resided in Buffalo and had many friends in that city. He was senior member of the firm of Whitney & Gibson at that time, and also was manager of the City Elevators. In 1892 he moved to Rochester and was president of the Whitney Elevator and Warehouse Co. at the time of his death. Mr. Whitney was born in Rochester on April 5, 1844. He received his education in the public schools and in an academy at New Haven, Conn. He then went into business and in 1869 entered the employ of his father. Since 1878 he had been a grain merchant and the head of the elevator company which bore his name. Three years ago he became ill and for the past few months his condition had grown rapidly worse. On the morning of his death his nurse had given him his breakfast and had left the room for a moment. He was recalled by a valet who was in attendance, and in a few moments Mr. Whitney had passed away. Two sisters survive him.

William Henry Nason, senior member of the grain firm of W. H. Nason & Co. of Springvale, Me., succumbed to the shock of an operation for hernia on November 23, aged 71 years. Mr. Nason was a self-made man, and through his successful business career had come to be one of the most influential residents of his community. He was born in Essex County, Massachusetts, on February 13, 1837, and grew to manhood on the home farm in Alfred, receiving his elementary education at the public schools of that town. He was at different times engaged in farming, lumbering and the real estate business. In the spring of 1877 he removed to Sanford, where he was a member of the successful grain firm of W. H. Nason & Co. In September, 1862, he enlisted for service in the Civil War in Company I, Twenty-seventh Regiment, Maine Volunteers, and was employed in picket duty in the defense of Washington throughout the nine months of his term. When discharged in July, 1863, he returned to York County. Mr. Nason was married twice. His second wife and two children by his first wife are left to mourn him. He was active in church work and in the work of the G. A. R.

POOR GRAIN CASE AFFIRMED.

In the case of the A. J. Poor Grain Company against the Chicago, Burlington & Quincy Railway Company and other carriers, the Interstate Commerce Commission, on November 13, in an opinion rendered by Commissioner Harlan, denied the complainant's motion for a rehearing.

The complainants routed a consignment of grain through Denver to a destination in California, when a shorter and less expensive route might have been adopted. The complainant objected to the freight charges on the shipment, maintaining that he was entitled to a rate by the shortest route.

The opinion holds that a lawfully published schedule speaks with equal authority to the shipper and to the carrier and both are chargeable with notice of the rate and of the route over which the rate is made applicable. When responding to an inquiry by a shipper a mistake made by a carrier, either as to rate or to the route, will not excuse the carrier from collecting the lawful rate or the shipper from paying it.

The Maryland Seed Corn Breeders' Association held a successful meeting at Baltimore on December 3 and 4. The Chamber of Commerce gave \$300 in prizes to corn and wheat exhibitors.

FIRES--CASUALTIES

The grain storehouse of George S. Wilcox at Providence, R. I., was damaged by fire to the extent of \$2,500 on November 22.

F. Stoner & Co.'s East Elevator at Akron, Ind., was destroyed by fire during November, at a loss of \$16,000. The origin is unknown.

A grain elevator was burned at Caledonia, Ont., on November 14, and other property was destroyed. The total damage was \$15,000.

Metcalf & King's elevator at Lanesville, Ill., was burned down on November 27, together with its contents, about 30,000 bushels of corn.

The Farmers' Co-Operative Elevator at McPherson, Kan., burned recently, causing a total loss, nothing being saved except the books.

Fire destroyed the Atlas Elevator at Conde, S. D., on November 14, together with 10,000 or more bushels of wheat. Adjacent property was greatly endangered.

The weight of too much grain caused the floor of a warehouse belonging to the Hutchinson Mill Co. of Hutchinson, Kan., to collapse on November 26, causing nominal damage.

The elevator belonging to the Middle Division Elevator Co. at Graymont, Ill., was destroyed by fire on December 2, together with other property. A total loss of \$13,000 is reported.

An elevator belonging to Niezer & Co. of Monroeville, Ind., burned down at Convey, Ohio, on November 15, entailing a loss of about \$12,000 or \$15,000. The loss is partially covered by insurance.

Fire destroyed the Mall & Thompson bean elevator at Charlotte, Mich., on December 7, causing a loss of \$4,500. The building was filled with beans. Business will be resumed by the firm at once.

About 1,800 bushels of oats went up in smoke on November 20, when the Esson & Light Elevator at Brook, Ind., was totally destroyed. Insurance partly covers the loss, which verges on \$10,000.

Fire destroyed the Kerlin Elevator at Delphi, Ind., on November 19, causing a loss of \$25,000. This, however, was well covered by insurance. The elevator was one of the largest in northern Indiana.

Elevator "B," owned by Fagg & Taylor at Milwaukee, Wis., caught fire by a dust explosion in November, but the flames were quickly extinguished by the fire department. The loss was nominal.

Fire of unknown origin attacked the plant of the Hayes-Shafner Grain Co. at Little Rock, Ark., on December 1 and caused about \$3,500 damage. The building was a one-story brick structure and was insured for \$2,500.

The Chilson Elevator at Plana, S. D., was destroyed by fire late in November, together with 6,000 bushels of grain. The fire is thought to have started in the office. It is estimated the loss will be \$10,000, well insured.

An elevator belonging to the Smith Grain Co. of Winnipeg at Wood Bay, Man., burned down recently, with a loss of \$6,000. The origin of the fire is unknown, but it is thought to have been caused by friction in a pulley in the cupola.

William Gage, a farmer residing near Bathgate, N. D., was smothered in a bin of barley in his granary, on November 14. While working over the bin he was struck by a bolster and fell into the bin in an unconscious condition and smothered.

Spontaneous combustion is believed to have been the cause of the fire which attacked Wallace & Cooper's elevator at Morriston, Ont., on November 28. The blaze was discovered in a quantity of dried brewers' grain, which was shoveled out. In this manner the building was saved from total destruction. The loss was \$2,000.

On November 29 the Hubbs, Lewis & Kaiser Elevator at Alexander, Ill., a station on the Wabash R. R., burned to the ground and was a total loss. About 15,000 bushels of corn and oats were destroyed. Insurance only partly covers the loss on the plant, which was only recently built. As there is no fire protection for the town the flames

simply burned themselves out. The house will be rebuilt.

C. W. Savage & Sons' Elevator at Virginia, Ill., was completely destroyed by fire in November, when 7,000 bushels of grain were lost. The damage was \$10,000, partially covered by insurance.

A grain warehouse at Severy, Kan., belonging to P. Ludvickson & Co., was burned in November. As there was no insurance the building and contents were a total loss. Some 400 bushels of oats, 25 tons of hay and a quantity of seed were burned.

Fire destroyed the old grain warehouse at Shreve, Ohio, belonging to the Orrville Milling Co., on November 27. The cause of the fire is unknown. It is estimated the loss was \$1,500, of which \$300 was on hay. Only \$200 insurance was carried.

There is a suspicion of incendiarism in connection with the fire which, on November 16, destroyed the steam mill and elevator owned by J. M. Crist & Son at Eagle Grove, Iowa. The plant and contents were valued at \$15,000, with insurance for \$6,500.

The Imperial Elevator at Osnabrock, N. D., caught fire the morning of December 4, and burned to the ground. About 25,000 bushels of grain and 250 tons of coal were destroyed, causing a loss of \$35,000. The origin of the fire has not been ascertained. It is expected the plant will be rebuilt as soon as possible.

A nine-year-old son of Andrew Anderson of Stephen, Minn., on November 21, while on his way home from school, in company with other boys, passed the town elevator. The boys dared one another to jump over the tumbling rod which connects the elevator with the engine house, which rod was a few feet from the ground, and in jumping over it young Anderson's blouse in some way became entangled in a screw that projected from the side of the rapidly revolving shaft, and in a second he was drawn around the shaft and his body jammed against the ground with such terrific force that every bone in his body was broken. Death was instantaneous.

A CHEAP NON-FREEZING SOLUTION.

As a cheap, efficient and reliable anti-freezing solution for water tanks for barrels and jackets of gas engines, calcium chloride has been found very satisfactory. In the first place, its freezing point is 54 degrees below zero, F. That is sufficiently low to withstand almost any climate. Secondly, it has no corrosive or injurious effects on the metals of tanks or engines.

To go into the matter further, calcium chloride is a white solid, which, when dissolved in water, makes a colorless and odorless solution. The freezing point of calcium chloride solution depends on the quantity of the chemical dissolved in the water. Four and one-half pounds to a gallon of water has a freezing point of 27 degrees below zero, and is found sufficient in most instances, but a solution can be made that will not freeze until 54 degrees below zero is reached, by dissolving 5½ pounds to a gallon.

The calcium chloride, though a hard, solid mass, can be broken into small pieces with little trouble, and will dissolve very easily and quickly, says the Gas Engine. Although a solution can be made by dissolving the proper amount to a gallon of water, it is best to test it with a salometer, which can be secured from the manufacturers.

The following table can be referred to when making the solution. The sign — denotes temperature below zero, and the sign + above zero, Fahrenheit:

Pounds per gallon....	2	2½	3	3½	4	4½	5	5½
Degrees, salometer....	52	80	88	95	104	112	120	124
Freezing point.....	+18	+4	-1.5	-8	-17	-27	-39	-54

As stated above, calcium chloride is very cheap, a fact that is due to the circumstance that it is made from the waste product of salt, but as all the salt impurities are extracted in the process of manufacture, the calcium is absolutely non-injurious. It is packed solid in sheet iron drums and tin cans, and must be broken by pounding the drum or can along the sides with an ax or sledge. The pounding breaks the mass into small pieces and the head of the drum is then knocked off and the calcium is put into the water and stirred until thoroughly dissolved; then test it with a salometer. A drum weighs about 675 pounds, and cans weigh 10, 50, 100 and 150 pounds. The drum is worthless after the calcium is removed and may be thrown away.

We may add, also, that gas engine tanks in which calcium chloride has been used consecutively for four winters show no sign of corrosion in excess of the rust caused by plain water.

PERSONAL

Olaf Anderson of Dassel, Minn., will become buyer for the local farmers' elevator company.

Silas Foote has left Virgil, Ill., to take charge of C. Keefe & Co.'s elevator at Maple Park, Ill.

E. A. Bailey, manager of the Atlas Elevator at Garretson, S. D., has been transferred to Randolph, Neb.

C. A. Powers, proprietor of the Powers Elevator at Genoa, Ohio, has been elected mayor of that town.

W. S. McLaughlin, of McLaughlin & Co., grain brokers at St. Paul, Minn., is seriously ill with pneumonia at Winnipeg, Man.

Arthur English of Omaha, Neb., who recently disposed of his interests in the Nebraska & Iowa Grain Co., has gone to Europe to spend the winter.

O. J. Tweet, who represented the Minneapolis & Northern Grain Co. at Argyle, Minn., has gone to Fisher, having closed the elevator at Argyle.

Eber Harnden has succeeded Otto Busch as grain and hay buyer in the elevator at Two Rivers, Wis. Mr. Busch resigned on account of poor health.

A. J. Hossler, who has been in charge of the Reed & Son Elevator at Argos, Ind., for the past season, has gone to Findlay, Ohio, to engage in similar business with his father.

J. M. Chicoine, of the feed mill firm of Quintal & Chicoine, Glenwood, Wis., has succeeded J. W. Harmon as agent and buyer for the Northern Grain Co., which he will represent in connection with his own business.

George E. Sayles, formerly manager of the Duff Grain Co. with elevators at Plattsmouth, Oreadopolis and Cullom, Neb., is seriously ill at his home in Cedar Creek, Neb., with a cancer of the liver. Small hopes of his recovery are entertained.

Henry Hendrickson, a wealthy grain buyer of Trent, S. D., has been released on bonds fixed at \$15,000 by Judge Jones of the Circuit Court. Hendrickson is charged with the murder of H. A. Bradfield, a drug clerk at Trent. He will be tried in the spring.

Ellin Bothum of Lanesboro, Minn., was almost smothered in a grain bin. While he was unloading grain he slipped and fell down the elevator shaft into the bin, and before his fellow workers could reach him more than 100 bushels of barley had poured in on him.

J. C. Hellner, of the Southern Grain Co. at Cincinnati, Ohio, resigned his position last month to become traveling auditor for the Southern Railway, with headquarters at Savannah, Ga. Upon his leaving the grain house he was presented with a meerschaum pipe by his friends on the floor of the Chamber of Commerce. Mr. Hellner was one of the most active members of the Chamber of Commerce.

William P. Kennett, secretary of Francis, Brother & Co., grain brokers at St. Louis, Mo., has been elected vice-president of the German-American Bank to succeed the late Charles Kircher. Mr. Kennett takes up his duties on December 15. It is said that he will not sever his connection with the Francis Company until the end of the fiscal year next June. He has been with the concern twenty-six years.

John Lindquist, a well-known Parkers Prairie boy, who is manager of an elevator at Radium, created quite a sensation in that town the other evening when at a basket social he bid \$15 and won the prettiest basket and the handsomest lady in the village. His friends say there'll be something doing "when Johnnie comes marching home again."—Parkers Prairie (Minn.) Independent.

James G. Martin, president of the Northern Grain Co. of Manitowoc, Wis., and Chicago, Ill., was run down by a Chicago & Northwestern switch engine at Duluth, Minn., on November 17 and narrowly escaped death. Mr. Martin was severely bruised and is able to be about only with difficulty. He had started to cross a street and after a fast passenger train passed did not see the approaching switch engine and was struck by it. He was thrown violently from the track and was stunned, but it was found that no bones had been broken and there is no internal injury.

TRANSPORTATION

After December 26 it is announced lower rates on grain products will be in effect between Texas points and points in Missouri on the Santa Fe.

Lake navigation closed for the most part on December 7. In Chicago the grain shipments were well over by the middle of November, for little corn or oats remained to be moved.

The grain rate at Duluth was raised to 1½ cents for Buffalo on November 23 to close the season. Considerable grain remained to be moved at that time. Navigation closed December 8.

On November 23 the new steamer W. M. Mills carried a record cargo of grain out of Duluth harbor. She loaded 421,000 bushels or nearly 21,000 bushels more than any cargo before loaded out of that place.

The Northern Pacific has repealed the rule that went into effect about a year ago preventing the use of its cars by other roads, so that now grain loaded into its cars can be sent to any part of the country over any road.

On November 25 the Illinois Central Railroad Co. announced a voluntary reduction in grain rates from Sioux City to Cairo, Evansville, Memphis, New Orleans, Jackson, Meridian and Helena, Ark., which will become effective on December 24.

The Missouri Pacific has placed another embargo on grain for Galveston providing it comes from Kansas or that vicinity. The restrictions were placed early in November because the railroad could not get cars enough to handle the business.

The federal court has enjoined the Washington state Railroad Commission from enforcing its "joint wheat order," which required the Oregon Railroad & Navigation Co., the Northern Pacific and the Great Northern to operate railroads as connecting lines in hauling wheat from all loading places of the state to ports on Puget Sound.

An appeal has been taken to the Oklahoma Supreme Court in the case of the St. Louis & Frisco vs. the Territory of Oklahoma, in which the territory sought and secured a temporary injunction restraining the Frisco from charging rates for shipment of corn and wheat in Oklahoma alleged to be higher than those in force in Kansas, Arkansas and Texas.

A decision was given out by the Interstate Commerce Commission early in December, to the effect that switching and terminal charges are lawful. The case was that of a Kansas city firm against the Santa Fe Railroad and the decision stated that when a consignee, or owner of a shipment, desires delivery to a point on the line of another carrier he must pay the lawful charge for such service.

The railroad embargo on grain from Buffalo to New York was raised on November 14, and it was agreed that all Buffalo and New York lines would co-operate in a movement to aid in the exportation of grain. The traffic managers and other important officials of the railroads met representatives of the grain trade and agreed to ship out 1,000,000 bushels of grain per week from Buffalo to New York up to the close of navigation.

A complaint was filed with the Ohio Railroad Commission on December 2 by the Pierce Grain & Hay Co. of Van Wert, against the Big Four and the Panhandle companies. It is alleged that although their tracks intersect in the city of Van Wert, and are connected by means of a connecting track, the two companies refuse to interchange. The Company uses an elevator and warehouse built alongside a Big Four sidetrack, built by the Big Four for the use of the Company, but the latter says the Big Four now refuses to handle cars from this sidetrack either to or from the Pennsylvania lines, and that the Pennsylvania refuses to handle any cars consigned to complainant, except over the Pennsylvania tracks.

A ruling from the attorney-general's office in the state of Washington has been given in connection with the law declaring 20,000 pounds of grain to be a carload and entitled to carload rates of shipment. The attorney-general is of the opinion that if the shipper simply ordered cars, or cars of the capacity given by him by the road in its tariff sheets and accepted such cars, under the tariffs as published, he would be bound to pay upon the minimum weights therein stated. When a shipper orders cars upon a tariff he is bound by the conditions imposed therein so long as such conditions are lawful. If, however, he indicated to the road the approximate amount of his shipment, and they, of their own accord, sent cars of the capacity in which the shipment was made, then they ought not to

charge for more than the actual weight of the shipment where the shipment exceeded ten tons.

The C. & M. & St. P. R. R. made a special rate of 7½ cents per 100 for the shipment of 700,000 bushels of fire-damaged grain from Superior to Milwaukee, Wis. The grain was purchased by C. R. Lull and Henry Berger of Milwaukee, and for the most part will be shipped to Milwaukee in special trains.

Through the Texas Shippers' Association the railroads of Texas have been persuaded to agree on the car demurrage question. In this agreement it is provided that the roads are to have five clear days to provide cars ordered by shippers in lots not exceeding five, and an additional day for each car in excess of five. A failure to supply cars within this specified time is to subject the roads to a fine of 50 cents per car per day. On the other hand, the shippers are to be allowed forty-eight hours for loading and unloading cars after they have been placed, and their failure to do so in this time will subject them to a penalty of \$1 a day. The shippers fought hard for equal penalties, but finally gave in when they found the roads were not to be moved from their position. It is further provided in the agreement that the roads are to be required to average twenty-five miles a day in moving loaded freight cars, and should they not make this time they are to be subject to a fine of 50 cents per day per car for every day beyond this limit in making deliveries of shipments.

DEMURRAGE LAW OF STATES.

The demurrage regulations in the states where available are given in the following. A considerable portion of the data presented was collected by the railroad commission of the state of Washington, compiled by J. W. Lysons. This commission has published in book form the laws of the state, to which is added a synopsis of the laws of other states. The value of the work is manifest. When not otherwise stated the rules shown are established by statute.

Alabama.—Application for three cars must be supplied within two days, not more than ten cars within five days, more than twenty-five within ten days, or pay shipper \$1 per day per car for such failure.

Loaded cars must be received and forwarded at least fifty miles per day.

Railroad failing to forward freight fifty miles per day shall be liable to shipper \$1 per day per car or one cent per day per hundred pounds, in less than carload lots.

Railroads shall notify consignee upon arrival of shipment.

Railroads must place cars at reasonable places for unloading within twenty-four hours after arrival.

Freight in carload lots or at carload rates, or freight taking track delivery, subject to the provisions of this act.

Shipper must load car within forty-eight hours or pay \$1 per day per car for such failure.

Car detained by shipper failing to give proper shipping instructions or for improper loading, shipper to pay \$1 per day per car.

Notice required by this act may be personal or by mail; if latter, twenty-four hours' additional time allowed without demurrage charge.

Freight not moved from depot within forty-eight hours after notice of arrival, liable to storage charges.

Shipper must unload car within forty-eight hours after notice of arrival, except certain goods may be allowed seventy-two hours, shall be liable for demurrage charges.

Arkansas.—Railroads to set cars in six days after application; demurrage at \$5 per car per day thereafter.

Railroads to give notice of arrival of cars in twenty-four hours; thereafter demurrage at \$5 per car per day.

Railroads to place cars in twenty-four hours after arrival; demurrage thereafter at \$5 per car per day.

Free time for loading or unloading, forty-eight hours; thereafter demurrage not to exceed \$5 per car per day; if no beginning at loading is made in forty-eight hours, railroad may collect \$10 and consider car released.

Railroad not compelled to furnish car to shipper owing demurrage.

Allowance for bunched cars.

Car held for lack of proper shipping instructions or imperfect loading, shipper to pay \$5 per car per day demurrage.

Colorado.—Shippers may have forty-eight hours' free time for loading.

Cars not used by shipper, no free time deducted. Consignee to have forty-eight hours for unloading.

Carrier may grant an extension of time for unloading.

Carrier must furnish cars within three days after application.

Demurrage and reciprocal demurrage rates, \$1 per day per car.

Florida.—Commission shall make reasonable and just rates and regulations to be observed by common carriers, including joint rates, and establish freight and passenger depots, and shall control passenger and terminal depots, and compel the establishment of union depots and to regulate the charges of storage and demurrage, and may regulate refrigerator cars, and rates for same.

Indiana.—Commission to establish demurrage and reciprocal demurrage rules.

Carrier must move freight fifty miles per day, under penalty.

Cars destined to sidetrack on a competing line at terminal points must be placed on such sidetrack by connecting line within twenty-four hours.

Car must be furnished within forty-eight hours after demand, under forfeiture of \$1 per day per car.

Reciprocal demurrage on coal cars to be \$2 per day.

Actions to collect demurrage not to bar action for actual damage.

Iowa.—Board shall investigate all failures or refusals to furnish cars or to haul, load or unload the same, and make such order as the public interest demands.

Railroad must furnish cars upon application without discrimination.

Road must supply cars in order of application therefor.

Company shall be liable to demurrage \$1 per day for each car failed to be furnished as provided in this act.

Applicant for cars shall deposit with agent one-fourth of the freight charges for use of cars; penalty for failure to load cars within forty-eight hours.

Railroad must receive cars when loaded and forward same at the rate of fifty miles per day, under penalty.

Railroad must give notice to consignee within twenty-four hours after arrival of shipment.

Consignee must unload car within forty-eight hours or pay to railroad \$1 per day for failure.

Louisiana.—Commission has power to make reasonable and just rates and regulations for railroad, steamboat and other water craft, sleeping car, freight and passenger tariffs, and supervise express rates, telephone and telegraph charges and prevent unjust discrimination, etc.

Maine.—Commission to give hearing on question of joint rate and terminal matters.

Michigan.—Commission may make rules for transportation of cars, and fix per diem demurrage rates and the number of miles per day cars may be moved.

Minnesota.—Railroads to furnish cars to shippers, on application, in forty-eight hours at terminal points and in seventy-two hours at intermediate points; demurrage accruing at \$1 per car per day thereafter in case of failure; damages may be collected in court also.

Railroads must move cars in twenty-four hours after notice of their readiness; demurrage thereafter in case of failure at \$1 per car per day and damages in court.

Railroads to forward cars from transfer point within twenty-four hours; demurrage thereafter of \$1 per car per day and damages in court.

Railroads to move cars fifty miles per day or pay \$1 per car per day demurrage.

Railroads to place cars forty-eight hours after arrival at destination; demurrage hereafter at \$1 per car per day.

Shippers to load cars in forty-eight hours after placing; demurrage at \$1 per car per day thereafter.

Shippers to unload cars of coal, lime, fruit and vegetables and lumber in seventy-two hours, other freight in forty-eight hours; demurrage at \$1 per car per day thereafter.

Mississippi.—Commission may revise rates from time to time as public welfare demands.

Missouri.—Cars to be furnished within four days.

Freight in carloads or less must be received and forwarded at the rate of sixty miles per day.

Carrier must give notice to consignee upon arrival of freight.

Cars to be placed at warehouse or sidetracked for unloading within twenty-four hours after arrival.

Shipper must load cars within forty-eight hours after delivery.

Car must be unloaded by consignee within forty-eight hours after notice of arrival.

Freight not in carload shipments to be removed from depot without demurrage within forty-eight hours after notice of arrival.

Demurrage and reciprocal demurrage on cars and demurrage on freight not in carload shipments per ton, \$1 per day per car, or per ton.

Montana.—Commission to have authority to change or abolish transportation rates.

North Carolina.—Cars must be furnished within four days after application therefor, under penalty of \$5 per day per car.

On application for cars company demand a deposit of \$5 for each car applied for.

Cars must be delivered within forty-eight hours after delivery to shipper.

North Dakota.—Consignee to remove freight from car within twenty-four hours without demurrage charge.

Oklahoma.—Commission to make rules, regulations and rates for all common carriers.

Ohio.—(State Commission Rules.) Railroads to give notice and place cars in twenty-four hours; demurrage at \$1 per car per day thereafter.

Cars of 66,000 pounds or less capacity to have forty-eight hours' free time; cars of over 66,000 pounds capacity to have seventy-two hours' free time; thereafter demurrage at \$1 per day per car; applies where railroads do the switching.

Additional twenty-four hours' time to industrial roads, etc., which do their own switching.

Allowance for cars bunched.

Average day plan optional.

Rules not to apply on coal at lake ports.

Oregon.—No discrimination in service except for live stock and perishable property; demurrage and reciprocal demurrage regulations.

Regulations governing demurrage and reciprocal demurrage.

Definition and rule governing demurrage, reciprocal demurrage.

Pennsylvania.—Maximum demurrage charge \$1 per car per day.

Free time for loading and unloading, forty-eight hours, counting from 7 a. m. of day following placing; car placed after 12, noon, free time to count from following noon.

South Carolina.—Commission shall make reasonable and just rates, for passengers and freight.

South Dakota.—Railroad must furnish car or cars within seventy-two hours after request, under penalty of \$1 per day per car.

Railroad must move car within twenty-four hours after notice of loading under penalty of \$1 per day per car.

Connecting line must move car within twenty-four hours after delivery thereof by connecting line, under penalty of \$1 per day per car.

Railroad must move car forward at rate of fifty miles every twenty-four hours.

Cars must be delivered to sidetrack or warehouse within twenty-four hours after arrival at destination.

Shipper must load cars within forty-eight hours after delivery of car under penalty of \$1 per day for car.

Consignee must unload car within forty-eight hours after notice of arrival thereof, under penalty of \$1 per day per car.

Demurrage under this act not to be in lieu of actual damages.

Tennessee.—Commission to supervise and fix freight and passenger tariff.

Commission shall revise rates and shall fix just and reasonable rates.

Texas.—May make rates for the storing or handling freight and for use of cars not unloaded after forty-eight hours' notice to consignee.

Wisconsin.—Railroad commission to have authority to fix reasonable rates, fares, charges, classifications and joint rates.—Traffic Bulletin.

PUBLICATION OF TARIFFS.

Referring the Commerce Commission to a specific case involving the construction asked for. Secy. Wells of Iowa asks that body the following:

"Will you kindly advise me of the practical construction that you would put upon this provision of the commerce act—

"Copies for the use of the public shall be kept posted in two public and conspicuous places in every depot, station or office of such carrier where passengers or freight, respectively, are received for transportation."

"Supposing that a shipper could show that the agent for the railroad company had failed to post in two public and conspicuous places in every depot, etc., would the railroad company not be liable for failure to comply with the law?"

"The fact of the matter is that these tariffs are not properly filed in many cases, and that the agents or employes of the railroad company are incompetent and indifferent about these matters. Is not a railroad company responsible for the negligence of its agents in failing to comply with the above act?"

In reply E. E. Clark, commissioner, said: "There is enclosed the following extract from an opinion by Mr. Justice White, in the case of the Texas & Pacific Railway Company against the

Cisco Oil Mill, 204 U. S. 449, decided February 25, 1907:

"The considerations which made necessary our decision, just announced, reversing the judgment of the Court of Civil Appeals in the Abilene case, equally apply in the instant case and compel like action.....

"The assumption, it is insisted, is authorized because, it is asserted, the conclusion that the schedule of rates became legally operative was not justified by the finding that such schedule had been filed with the Interstate Commerce Commission and copies thereof furnished to the freight officers of the railroad company at Cisco and other points. The contention is without merit. The filing of the schedule with the Commission and the furnishing by the railroad company of copies to its freight offices incontrovertibly evidenced that the tariff of rates contained in the schedule had been established and put in force as mentioned in the first sentence of the section, and the railroad company could not have been heard to assert to the contrary. The requirement that schedules should be "posted in two public and conspicuous places in every depot," etc., was not made a condition precedent to the establishment and putting in force of the tariff of rates, but was a provision based upon the existence of an established rate, and plainly had for its object the affording of special facilities to the public for ascertaining the rates actually in force. To hold that the clause had the far-reaching effect claimed would be to say that it was the intention of Congress that the negligent posting by an employee of but one instead of two copies of the schedule, or the neglect to post either, would operate to cancel the previously established schedule—a conclusion impossible of acceptance. While section 6 forbade an increase or reduction of rates, etc., "which have been established and published as aforesaid," otherwise than as provided in the section, we think the publication referred to was that which caused the rates to become operative; and this deduction is fortified by the terms of section 10 of the Act, making it a criminal offense for a common carrier or its agent or a shipper or his employee improperly "to obtain transportation for property at less than the regular rates then established and in force on the line of transportation of such common carrier."

"Whether, by the failure to post an established schedule, a carrier became subject to penalties provided in the Act to regulate commerce, or whether, if damage had been occasioned to a shipper by such omission, a right to recover on that ground alone would have obtained, we are not called upon in this case to decide."

"You will note in the last paragraph of that extract what the Supreme Court says in reference to whether or not the failure to post the established schedule makes a carrier subject to the penalties provided in the Act, or whether, if damage has been occasioned to a shipper by such omission, a right to recover on that ground alone would obtain."

"The question involved is one which should be passed upon by a court, not by this Commission; and, therefore, we could express no opinion in reference to the matter."

A WHEAT RECEIPT.

On Monday morning a farmer found himself in need of \$50 in cash and all the banks closed.

However, he had a pocketful of wheat receipts, for wheat in the warehouse, and worth 75 cents per bushel.

So he asked the implement dealer to take wheat receipts for his bill and he did so. Then the implement dealer paid the merchant \$50 in wheat receipts; the merchant turned it to the cold storage and commission people, who accepted it willingly, as it was as good as gold.

The drayman accepted it for his month's hauling, the coal dealer took it for fuel, the butcher accepted it in payment of a meat bill and the farmer accepted it in payment for a fat cow, for he knew better than anybody the value of wheat in the warehouse.

When the business of the day closed the little wheat receipt found its way into an old tin box. It had paid off \$380 in debts during the day and not a cent of actual cash had accompanied it on its rapid run through the channels of trade of the town.

Money is a useless commodity after all.—Portland Oregonian.

The Northeastern Indiana Grain Dealers' Association, at a meeting at Fort Wayne, on December 2, decided to buy no new corn before December 10, or until it is dry enough to ship.

CROP REPORTS

Bountiful rains the latter part of November fell just at the right time to put the ground in excellent shape for seeding and boost the fall sown wheat materially in its growth.

Advices from Los Angeles, Cal., stated late in November that the continual absence of rain is costing the farmers thousands of dollars and threatened to destroy the newly planted crops.

F. W. Thompson, managing director of the Ogilvie Flour Mills Co., Ltd., of Montreal, Que., said on November 30 that he believed the wheat yield would equal that of last year, despite the decrease in acreage.

The Michigan report for November shows the condition of wheat as 83. During the month 161,260 bushels of wheat were marketed. The estimated amount of wheat marketed in four months was 3,000,000 bushels. The condition of rye is 86.

The Minister of Agriculture of Argentine Republic on November 28 reported the grain crops out of danger. There will be 4,000,000 tons of wheat for export; 1,000,000 tons of flax and 400,000 tons of oats. The total value of the crops is \$200,000,000.

Good rains fell in various parts of Nebraska the latter part of November and proved of much value to the growing wheat. The Burlington reports show the winter wheat has an increase of from 5 to 10 per cent acreage while the condition is unusually good.

The Pope & Eckhardt Co. of Chicago sent out copies of letters from its correspondents last month. A perusal of the Illinois reports seems to show corn turned out very good. In some localities it was light and soft. Yields of from 30 to 65 bushels are reported.

Secretary Wells, of the Iowa Grain Dealers' Association, has sent out his December report, estimating the corn crop of the state at 249,000,000 bushels, as compared with 388,000,000 bushels last year. The oats yield is given at 39,000,000 bushels less than last year. Mr. Wells reports 40 per cent of the corn as chaffy.

The Missouri crop report appeared on December 9, showing the wheat condition as 85, or 3 points better than a year ago, when it was 82. The acreage sown this fall is 6 per cent less than last year, owing to the drought. Last year the condition was 82 for December and up to 94 in April but down to 80 for harvest in June.

Frank O. Fowler, secretary of the Northwestern Grain Dealers' Association, sent out the following estimate on November 15 of the crop yield of Manitoba, Saskatchewan and Alberta:

	Acres.	Yield.
Wheat	5,013,544	64,675,000 bu.
Oats	2,373,030	81,395,000 bu.
Barley	663,833	16,795,000 bu.
Flax	105,050	1,071,500 bu.

The Ohio December report showed the condition of wheat to be 80, or two points less than last year. Last December it was 98. Only two counties report a full average condition. The low condition is due to the late seeding and unfavorable weather. The corn crop is estimated at 102,200,000 bushels, being 25,000,000 bushels less than in 1906, and the quality is also below the average. Much of it is soft and unmerchantable. The report says 43 per cent of the 1907 crop was sold from thrashers.

On December 10, the initial estimates of the acreage and condition of winter wheat were given out by the government agriculture department. The indications were of a total sown area of 31,069,000 acres, or 596,000 acres less than Dec. 1, 1906. The condition was given at 91.1, compared to 94.1 a year ago. On the popular basis of computation—seventeen bushels to the acre—the Government's report indicates a yield of 481,000,000 bushels, compared to approximately 507,000,000 bushels, indicated by the statement of December last. Since December 1 important sections of the winter wheat region have received beneficial rains, and, while complaints of mild tenor have been received from Ohio, Michigan and parts of the Southwest within the last few days, the bulk of advices indicates favorable progress. Oklahoma has mentioned the presence of the Hessian fly, but up to date practically nothing has been said about the aphid, or "green bug," which caused such havoc with the 1907 yield and was the basis of the big bull campaign in wheat last May. The following table shows for each of the principal states the percentage of acreage sown

to winter wheat this fall as compared to that sown last year, the estimated acreage sown this fall, the average condition on Dec. 1, 1907, the corresponding average for 1906, and the mean of December averages for ten years:

States—	Pct.	Acreage.	1907.	1906.	Condition 10 yr. av.
Kan.	100	5,930,000	95	95	95
Ind.	100	2,779,000	91	95	90
Mo.	98	2,271,000	93	91	92
Ohio	96	2,126,000	94	97	94
Neb.	105	2,359,000	93	98	98
Ill.	101	2,381,000	91	94	94
Penn.	98	1,626,000	86	98	94
Cal.	91	519,000	88	90	94
Okl.	95	1,579,000	94	93	93
Texas	78	988,000	93	94	93
Mich.	93	896,000	87	89	94

U. S. 98.1 31,069,000 91.1 94.1 93
The rye sown area on December 1 was given at 2,015,000 acres, or about 46,000 acres less than a year ago. The condition was 91.4, compared to 96.2 on December 1, 1906, and a ten-year mean average of 95.8. Government will give out on December 20 its final estimates of all the principal 1907 crops.

Secretary F. D. Coburn, of the Kansas Department of Agriculture, issued his final crop report for the year on December 3. Among the most interesting facts depicted are the following: Aggregate agricultural and live stock products for the year were worth \$463,648,606, which is \$39,313,739 ahead of the record. Wheat production was 74,155,695 bushels; average per acre, 10.24 bushels; value, 76.5 cents per bushel; aggregate value, \$56,787,512, or \$1,608,801 in excess of any preceding year. Corn production, 145,288,326 bushels; average per acre, 21.1-3 bushels; average, 43.32 cents per bushel; aggregate value, \$63,040,743, or \$6,253,232 greater than wheat. Value of products of the year per capita of population, \$280. Mr. Coburn takes occasion to show that macaroni wheat yielded 50 per cent less per acre and brought 11.6 cents less per bushel than its competitor.

[From "American Brewers' Review."]

AMERICAN MALTING METHODS.

BY WM. H. PRINZ.

Our system of valuation and grading of barley is wrong. We have, in some cases, state, in others, board of trade inspection. The one is controlled by politics, the other by favoritism. The men doing the sampling have no idea of judging barley, only following the prescribed rules. No maltster, brewer or barley buyer pays any attention to the grading and buys by sample only.

In Chicago we have the following rules (quotes them.)

In other barley markets, Minneapolis, Duluth or Milwaukee, the rules do not differ much. We see by these rules that the grading is done by ocular inspection, and the chemical properties of the barley play no part.

In Europe we have two systems with but a slight difference. The one is called the Berlin or Haase system, the other is called the Vienna system. The difference is in the amount of albumen content of the barley, for which in the Berlin system 11 per cent, in the Vienna system 13 per cent, must not be exceeded. Among other features there is the 1,000-kernel weight. This is of some value for us. There is not much difference between the two systems as to color, uniformity of berry, shape of berry, fineness of husk, impression as a whole, odor and damaged grain. But in the number of value points the most important feature, which is of great importance to us on account of our farming methods, is entirely forgotten in both systems—that is, the degree of maturity.

The system we should adopt in this country should be entirely different. I would place maturity of barley in the first column in the order named. Then highest albumen content, uniformity of berry, odor, medium husk, shape of berry, abuse of damaged grain. A barley which is fully matured, with a high amount of albumen, uniform in berry, medium of husk, of good odor and healthy, even if the color was not bright, should be entitled to the highest mark. It would be the best malting barley, even if the increase in malting would not be the highest and the extract in the brewery the largest. Ocular inspection should not be used alone, but both ocular and chemical. No matter how good a judge a barley buyer may be, if he would follow the barley through the malting and brewing processes, he would find out how many mistakes he makes if guided by ocular inspection alone.

But what is the use of making new rules? We must begin with the farmer and get him to raise the barley we want, and then pay a better price for

such barley, which the maltster can well afford to do.

Another method we use, which is radically wrong, is our bushel measure, buying the barley at 48 pounds per bushel, and selling malt at 34 pounds per bushel. Many a brewer thinks that a malt should weigh 34 pounds in the volume measure, and that in a sprout-free condition. Now, if a maltster uses 48-pound barley and malts the same down to 34-pound malt, he should have a conservator appointed, as he loses the most essential product the brewer must have. Even 36-pound is too light for 48-pound barley; 48-pound barley properly malted should weigh nothing less than 38 pounds in sprout-free condition, according to the maturity of the barley. We should discard this bushel measure.

In my article on "Loss in Malting," American Brewers' Review, November, 1905, I wrote as follows:

"In America we do not mention loss, but speak of an increase in malting. There is no increase, but a decrease in weight and substance. Our antiquated system of measuring by the bushel is responsible for this, for as long as barley is bought at 48 pounds and malt sold at 34 pounds per bushel, which is the struck bushel standard, we are not buying and selling by weight, but by the bushel, although we do not use the volume measure bushels, and we have an increase where there is actually a decrease. California, Oregon and Washington are the only states using the hundredweight standard by which barley is bought and malt sold. This hundredweight standard should be adopted universally, as it avoids a great deal of confusion and annoyance."

It is curious that in a country like ours claiming a high degree of progress and intelligence, we keep on using such an antiquated system of weights and measures and do not adopt the metric system which is the same as the hundredweight standard, buying and selling by weight and not by the bushel.

In buying barley the maltster should pay attention to the amount of water it contains, which in some years varies from 10 to 18 per cent. Formerly it took three or four hours to make an analysis for water, but with improved apparatus this can be done in less than an hour. After making a number of such tests the barley buyer could train his eye and hand, and after a little practice could tell at a glance which barley contains the most water. I understand the big flour mills of this country have adopted this method for wheat.

As I mentioned before, it would be of the greatest advantage to barley buyers to follow up the barley through the malting process, visit malt houses and converse with the maltsters in charge. They could certainly gain valuable knowledge and see how certain malts work in the brewery.

Barley, before being made into malt, should be thoroughly cleaned. First, over a separator, or scalper, to take out the straws and sticks, then over a finishing cleaner, to take out all foreign seeds and broken kernels, then over a needle machine, to take out the oats and light barley. There is no use leaving them in and wetting them in the steep tanks, and then redrying them. This is not only a waste of labor and power, but it also reduces the malting capacity.

The time is not far distant when all barley will be graded according to size. At least two grades should be made and malted separately, the heavy grains to be used for keg beer malt and the lighter for bottle beer and distillery malt. In the year 1895 I had a machine constructed for that purpose which worked very successfully. The machine, however, being ahead of the times, was not put into general use. But I notice now that several maltsters at least have adopted this grader with good success, and it will be but a few years before its use becomes general.

IMPORTS AND EXPORTS OF BARLEY AND MALT.

BARLEY.

Imports—	Bushels.	Value.
October, 1906	2	\$ 1
October, 1907	39,289	19,570
Ten months ending Oct., 1906....	2,521	1,544
Ten months ending Oct., 1907....	42,209	21,399

Exports—	Bushels.	Value.
October, 1906	1,709,808	925,317
October, 1907	1,022,539	768,254
Ten mos. ending Oct., 1906....	11,690,619	5,842,051
Ten mos. ending Oct., 1907....	4,764,899	3,070,461

BARLEY MALT.

Exports—	Bushels.	Value.
October, 1906	12,355	\$ 8,497
October, 1907	16,117	12,396
Ten months ending Oct., 1906....	589,464	402,007
Ten months ending Oct., 1907....	343,956	242,143

Frank Goggin of De Graff, Minn., is now in charge of the Hernapin Elevator at that place.

THE CO-OPERATIVES

The Westhope Commercial Club of Westhope, N. D., owing to the heavy margin exacted by the line elevators, as is claimed, has decided to handle farmers' grain, but appeals to wholesalers and jobbers to get them cars in which to ship the stuff.

The North Dakota Grain Commission, composed of M. O. Hall of Moball, A. R. Thompson of Raleigh and E. D. Washburn of Hope, recently went to Minneapolis, Duluth and Superior to investigate. Through Mr. Hall the Commission is said to have declared its belief that the farmers of North Dakota are losing \$3,000,000 a year through the present inspection, nevertheless the Commission was unable to find anything wrong with the work of the inspection department or to determine how the \$3,000,000 is lost.

The Manitoba Grain Growers' Association will ask the Dominion government to amend the banking act to allow banks to loan money to farmers on the security of the grain on the farm. The government will also be asked to itself operate the terminal elevators at Fort William and Port Arthur and to appoint an inspector of Manitoba grains at British ports. Other requests will relate to the finality of Manitoba grain certificates, a permanent board for grading wheat, compensation from railways for loss sustained from fires, and lowered freight rates on coarse grains.

A. S. E.

The annual meeting of the North Dakota Branch of the American Society of Equity was held at Devils Lake on November 20. There were 285 delegates present.

Much of the time of the convention was taken up with thrashing over the case of J. A. Everett, former national president, who was the originator of the Society and publisher of a farming paper which has been the official organ of the Society.

T. G. Nelson, president of the grain growers' department of the Society, said that two-thirds of the Indianapolis convention had assembled with the idea of defending Everett, but before the convention was over the number had dwindled to nine. He was ousted and a new organ has been established.

Mr. Nelson assured the farmers that if they stuck together they could fix the price on their product by next year. In answer to a question, he stated that he could not say whether the farmers were responsible for the present price of wheat.

The convention was unanimous in believing that the fight for better prices would be continued and efforts redoubled to gain membership.

Resolutions were passed strongly denouncing the attitude taken by former Secretary Shaw with reference to his drawback ruling on Canadian wheat. Another resolution indorses the action taken by Pure Food Commissioner Ladd of this state in barring adulterated flour and other impure foods from the state.

IN A BAD WAY IN KANSAS.

The Farmers' Union in Kansas is confronted by a "condition, not a theory." There is a heavy deficit, which the directors will be called on to provide for at the Topeka meeting on December 17. This is the more momentous, it appears from the official organ, because "under the law individual members are liable for the debts of the order; and immediate action is necessary to stop the shortage or before we know it some of us will be sued for the amount."

Now, this condition of things, as we find in the official organ, the "Advocate," is due to expenses of the president, secretary and lecturers, in all \$1,000 a quarter. "When the state was organized in May the number of male members or dues-paying members was about 4,000," says the organ, "but according to the best information possible at least half of these have dropped out. The amount that goes to the state each quarter is seven and one-half cents for each male member. Granting that 2,000 are paying dues, the amount going into the state treasury from this source is \$150 a quarter. Not enough to go very far toward paying the actual running expenses."

The directors on December 17 will have to provide for about \$3,500.

Grain receipts at Chicago in November were only 8,154 cars, the smallest in the same time for over thirty years.

Issued on November 12, 1907.

Issued on November 19, 1907.

870,010.

871,650.

871,630.

872,462.

872,927.

872,130.

872,479.

871,536.

872,755.

870,087.

Issued on November 26, 1907.

Issued on December 3, 1907.

FOR SALE.

FOR SALE.

FOR SALE.

WANTED TO SELL.

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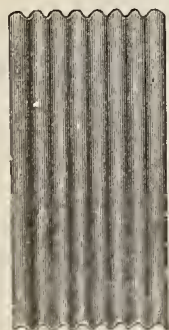
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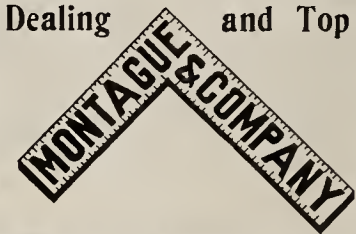
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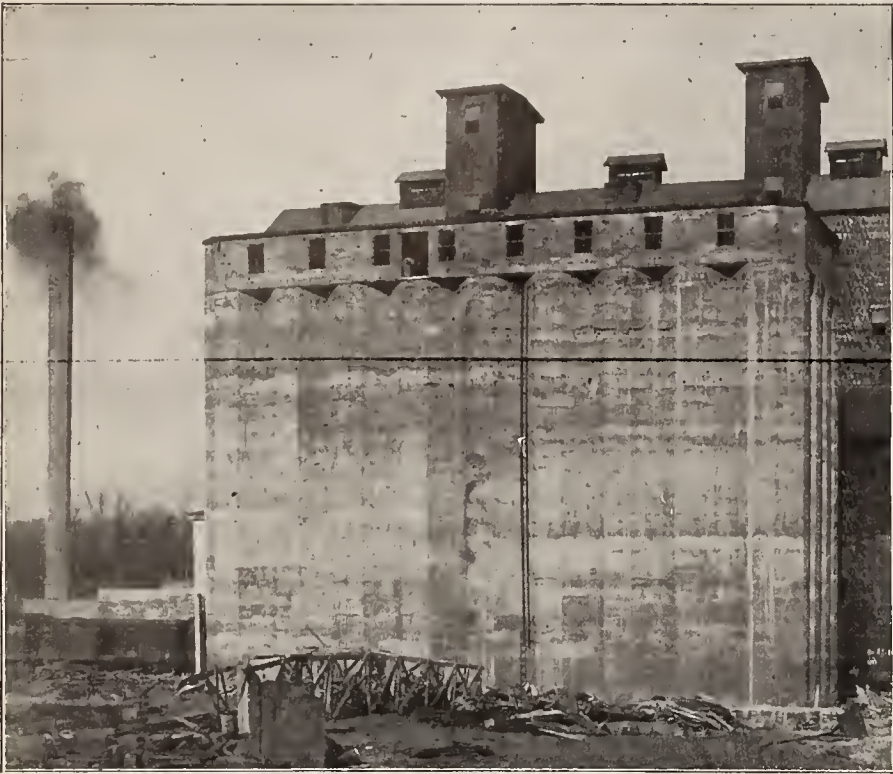
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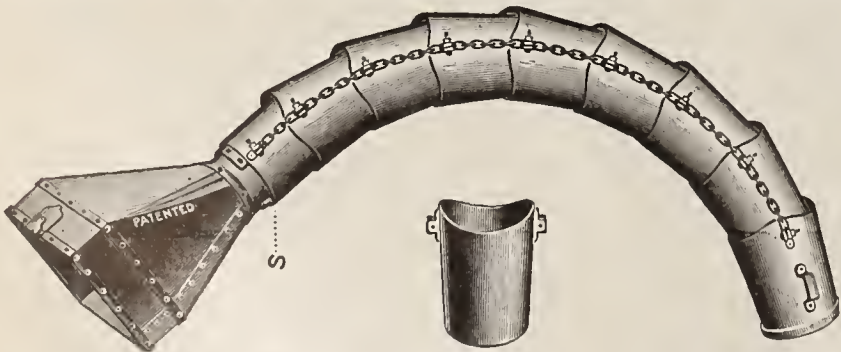
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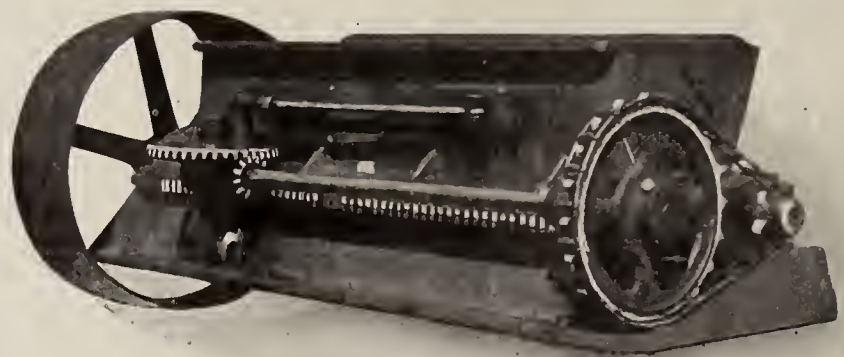
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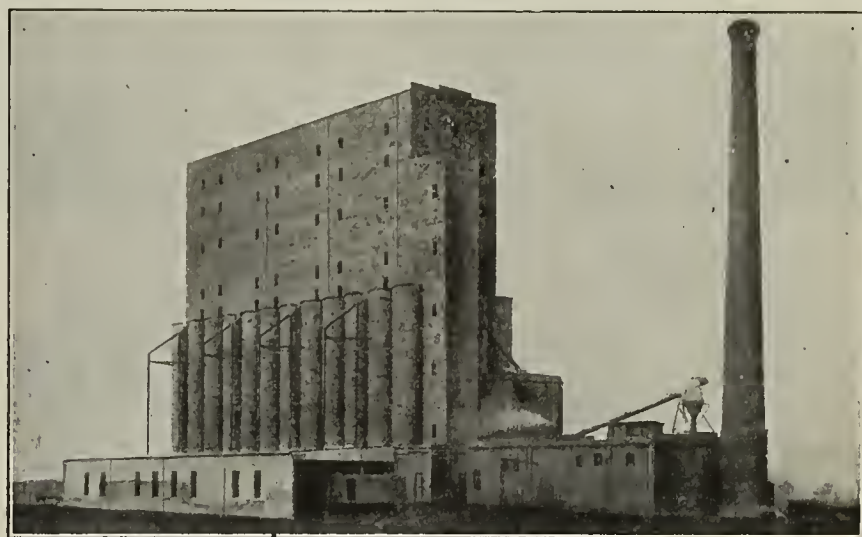


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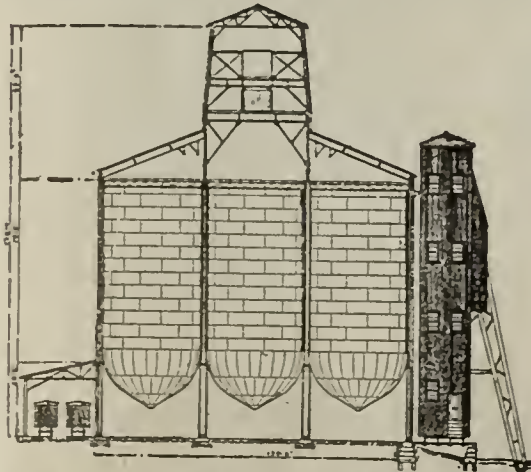
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THE CAPITAL CONSTRUCTION CO.

INCORPORATED, \$25,000.00

SUCCESSORS TO J. A. HORN

Designers and Builders of Grain Elevators, Warehouses and Mills of concrete, wood or steel. Full equipments furnished. Plans and specifications a specialty. We own and operate our own rock crushers and granite quarries.

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DESIGNERS AND
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Manufacturers of Grain Cleaning Machinery, Elevator Machinery and Supplies

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OLSON BROTHERS & CO.

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Elevating and Conveying Machinery

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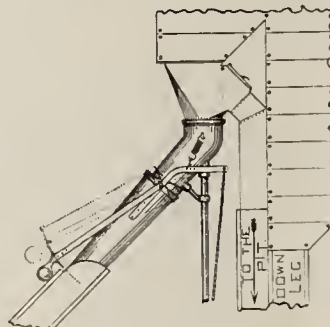
CHICAGO

THE PEERLESS

Automatic Distributing Spout

WITH THE

Peerless Automatic Head Hopper



Distributes all the grain all the time. Mixing grain when distributing it is impossible. Scattering grain when distributing it is impossible. Sending grain down the back leg is impossible. It fits in place of any other spout. It operates the same as other spouts. It uses the same indicator as other spouts. Any other spout works with the Head Hopper.

It Will Serve 14 Bins.

The Distributing Spouts are sold together with the Head Hopper or separate.

Write for Circulars and Prices.

PEERLESS GRAIN SPOUT COMPANY

505 Commonwealth Ave., Detroit, Mich.

MINNEAPOLIS STEEL & MACHINERY COMPANY

DESIGNERS AND BUILDERS OF

Steel Elevators with Full Equipments

Give us the opportunity to submit you plans and estimates. We can please you. Ask us for Catalogue "A" Twin City Corliss Engine and Catalogue "F" Elevator and Power Transmitting Machinery.



MINNEAPOLIS STEEL & MACHINERY CO.

MINNEAPOLIS, MINN.

Unless your ELEVATORS and GRAIN are safely and fully insured an unfortunate fire may wipe out the season's profits.

Land your balance on the "NET GAIN" side of the ledger by covering building and contents through the

Elevator Underwriters

Special rates,

Special terms

Special service

On Short Time

Grain Insurance.

Wire your orders at our expense, and you will be safe.

U. S. EPPERSON

Attorney and Manager.

R. A. Long Bldg., Kansas City, Mo.

The Grain Shippers Mutual Fire Insurance Association

WRITES

Fire, Lightning and Tornado Insurance on Grain Elevators

Risks in force, \$7,000,000.00

Losses paid to date, \$335,000.00

IF INTERESTED, ADDRESS

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Ida Grove, Iowa

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GIBB'S PATENT DUST

PROTECTOR is invaluable to operatives in every industry where dust is troublesome. It has been thoroughly tested for many years in every kind of dust and is the only reliable protector known. Perfect ventilation. Nickel-plated protector, \$1, postpaid. Circulars free. Agents Wanted.

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Elevators and Conveyers FOR SACKS, BARRELS, BOXES



Illustrated in Catalog No. 80. Mailed free with other

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LOW COST

FOR

SHORT TERM INSURANCE

Grain insurance at short rates means from 20 to 140 per cent more than the pro rata cost for the same length of time. Short term insurance with the



means from 40 to 50 per cent below pro rata for the time carried. No grain dealer is using the best business precaution who does not learn our price on his elevator and keep fully protected with us.

C. A. McCOTTER, Secretary,

Board of Trade Bldg.

MILLERS MUTUAL FIRE INSURANCE ASSOCIATION OF ILLINOIS

ALTON, ILL.

Wrote... \$5,348,463.75 insurance last year
Paid \$110,724.14 in losses last year
Added..... \$24,230.30 to surplus last year
Assessed only 45% of basis rates last year

If you want the best of insurance at the lowest cost, write to us.

Insurance in force..... \$10,158,139.43
Face value of notes..... 1,451,877.89
Cash assets 300,148.96

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CHICAGO AGENT

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MILL OWNERS' MUTUAL FIRE INSURANCE COMPANY

DES MOINES, IOWA

Insures Mills, Elevators and Warehouses at actual cost.

Net Cash Assets, \$ 254,314.69
Losses Paid, - 1,282,844 90
Saved to Policy Holders, \$1,665,098.34

Our Deposit Notes represent but one annual premium.

ORGANIZED IN 1875

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Millers' National Insurance Company

205 La Salle St.

CHICAGO, - - ILL.

CHARTERED 1865

Insurance with a maximum of security at a minimum of cost for ELEVATORS, WAREHOUSES and CONTENTS, on the Mutual Plan.

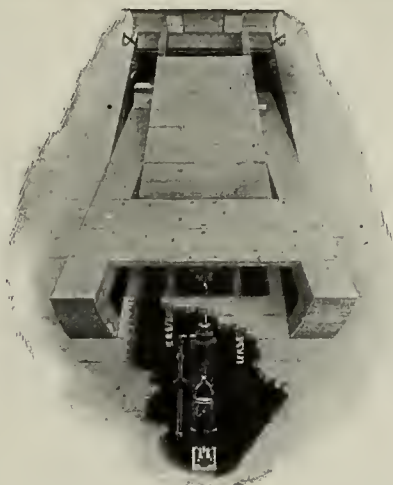
Five-Year Policies (or short term policies on grain, if required).

Semi-Annual Assessments, costing about one-half Stock Company rates.

No conflagration hazard.

Gross Assets, - - \$4,429,866.14
Net Cash Surplus - 848,660.89

Reliance Automatic Dump Controller



This device is the only Automatic dump controller on the market that requires neither hand nor power to operate.

It causes the dump to settle down easily without the least jar or jerk and prevents accident to wagon or team.

This device is a small cylinder filled with cold tested oil in which travels a piston which is attached to the front end of the dump. The motion of the dump is controlled by the forcing of this oil through a regulating valve, which can be adjusted to suit operator.

Equip your dumps with them and avoid accident in the handling of the coming crops. Shipped on trial to responsible parties. Write us for particulars and price.

RELIANCE CONSTRUCTION CO.

625 Board of Trade Bldg., Indianapolis, Ind.

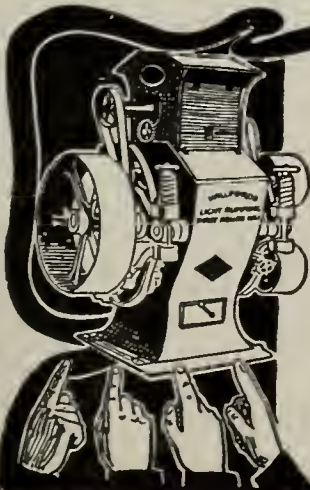
Insurance on Elevators and Grain!

26 Years of Successful Business

We Have--Paid \$1,766,407.89. Total Assets \$2,211,030.03. Net Cash Surplus \$367,263.93.

Michigan Millers Mutual Fire Insurance Co.

OF LANSING, MICHIGAN.



4 GOOD POINTERS

ON THE

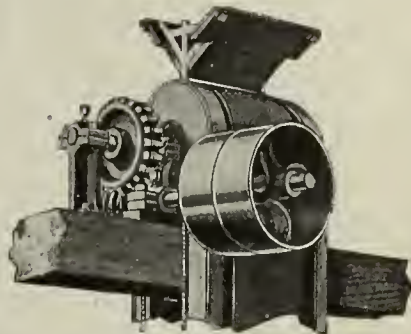
Willford Three-Roller Feed Mill.

- (1) It Is Easy to Handle.
- (2) It is Strong and Durable, but Simple.
- (3) It will Grind the Most Feed with the Least Power.
- (4) It can Always be Relied Upon.

Write for Circulars and Prices.

WILLFORD MANUFACTURING CO.,
303 3d St. South, - MINNEAPOLIS, MINN.

The Humphrey Employee's Elevator



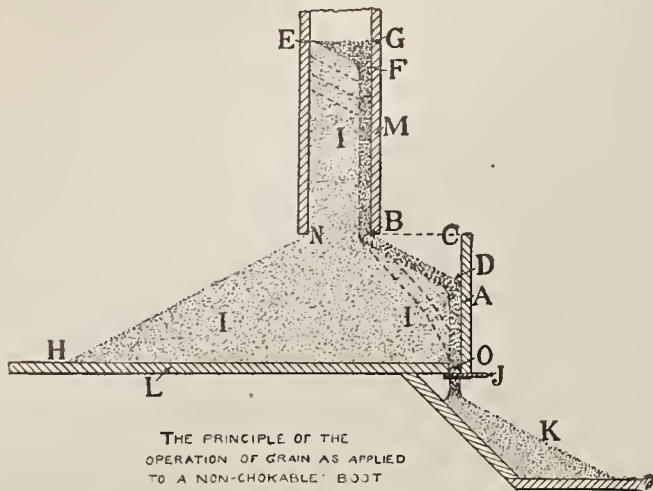
For eighteen years it has been the standard elevator for grain elevators and mills. The simplest and most reliable lift for grain elevators that can be devised. Let me send you catalogue and quote prices.

S. K. HUMPHREY

53 State Street

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Illustrating the basic principle of
HALL NON-CHOKABLE BOOT



Catalogue "E" gives all details and will convince you that the problem of "Choked Boots" is successfully solved and that all buckets on the belt can go continuously, full to the brim, practically doubling the elevating capacity.

HALL DISTRIBUTOR CO.

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THE DENNING CORN CRIBS

Will store the corn you buy until you are ready to shell it; then you roll it up and put it out of the way until next year. They are cheap.

THE DENNING STEEL GRAIN BIN

Is what you need when there is a car shortage. You can sell them to farmers. Address

THE DENNING WIRE & FENCE CO.
Cedar Rapids, Ia.



At Our Own Mills

are running rope drives of every type and class; ropes running indoors and outdoors; ropes driving at all angles, in cold rooms and hot, in dusty rooms and clean; drives of 8-foot centers to straight drives of 225-foot centers.

Every principle involved in the transmission of power has been tested by actual practice in our enormous mills and studied by our engineers. If you are interested in rope driving we shall be glad to furnish you valuable data bearing on its efficiency and economy.

Write for our "Blue Book of Rope Transmission" and samples of "American" Transmission Rope.

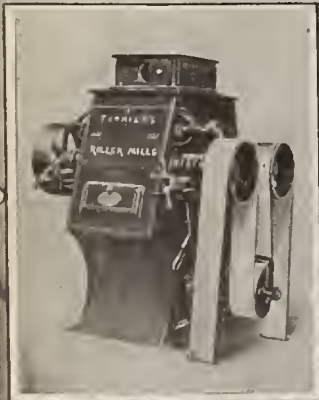
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**MILL BUILDERS
AND FURNISHERS**

**ACME CORN
AND FEED MILLS**
4 AND 6 ROLLS.



Rolls Reground and Recorrugated.
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Progressive Grain Men

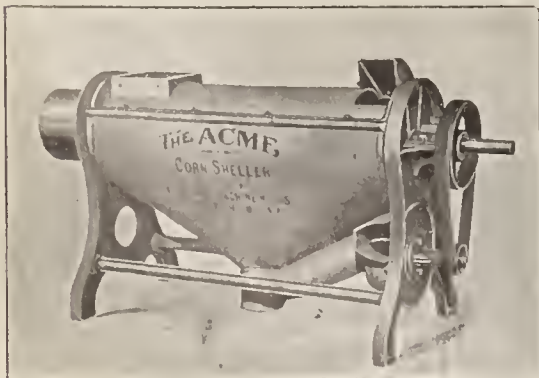
Are interested in all phases of the grain business, the milling as well as the marketing of grain. They aim to keep in touch with the consuming trade and know what becomes of their grain in the markets of the world. Such men find the

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a big help because it fully covers the business of milling wheat and other cereals.

Published on the first of each month, it gives all the news of the milling world and prints a large amount of technical matter that is of interest to the elevator man as well as the miller.

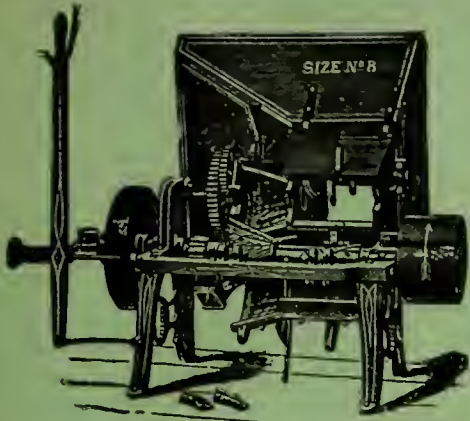
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— OF —
**BOLTING
CLOTH**

ELEVATOR, FEED MILL AND
BUCKWHEAT MACHINERY.
PLANS FURNISHED IF DESIRED

Bowsher's All-Around Feed Mill



(Sold with or without sacking elevator)

It CRUSHES ear corn (with or without shucks) and GRINDS all kinds small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS, DIFFERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

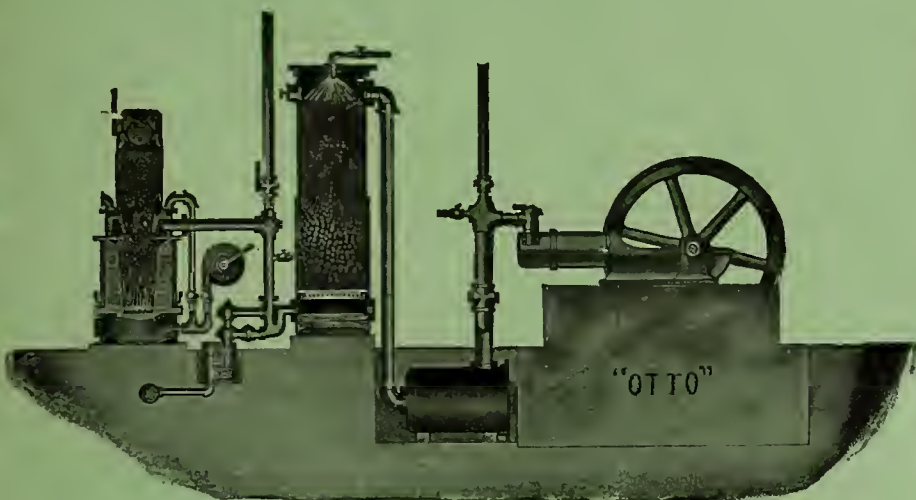
YOU NEED a mill now. QUIT THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best.

SEVEN SIZES: 2 to 25 H. P.
Circular sent for the asking.

Drive pulley overhung. Belt to it from any direction. Makes complete independent outfit.

THE N. P. BOWSHER CO., South Bend, Ind.

Every Miller Is Interested In This



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Flour, Feed, Millstuffs and Grain

Otto Gas Engine Works, Philadelphia, Pa.

PLATTE, SO. DAKOTA
Jan. 20, 1906

Gentlemen:

We have been using one of your No. 4 gas producers and a No. 11 gas engine for the past six months running our 80-barrel flour mill and our elevator in connection with the mill. We run 12 hours every day and use about 600 pounds of anthracite pea coal for the 12-hour run. The engine and producer work easy and with very little attention. It is the cheapest running power plant we know of. We can start our feed mill any time when we are running flour mill at full capacity and grind from 15 to 20 bushels of feed per hour, and the engine takes the extra load without any perceptible difference in the work of mill or engine. We are well pleased with the power plant.

Yours very truly,

Charles Mix Co. Milling Co.

The words reliability, economy and satisfaction mean something when applied to "OTTO" engines and producers.

THE OTTO GAS ENGINE WORKS.

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THE ALBERT DICKINSON CO.

DEALERS IN

GRASS SEEDS, CLOVERS, FLAX SEED, LAWN GRASS, BEANS, PEAS, POP CORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC.
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Show the value of any number of bushels or pounds of WHEAT, RYE, OATS, CORN OR BARLEY at any given price from 10 cents to \$2.00 per bushel. One of the most useful books ever offered to millers. Indorsed by prominent millers and grain dealers. Bound in cloth, 200 pages. Mailed on receipt of price

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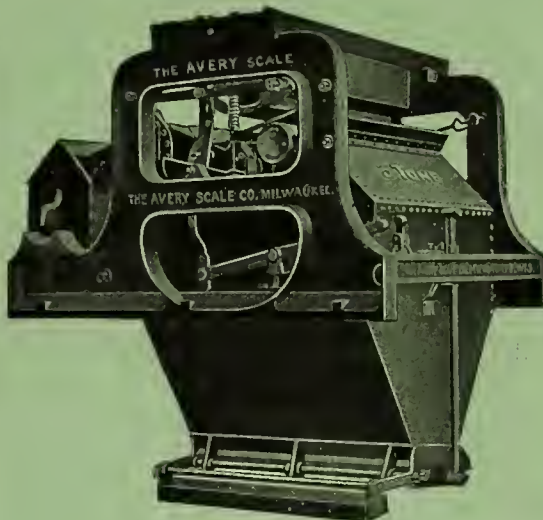
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It is time to write us about

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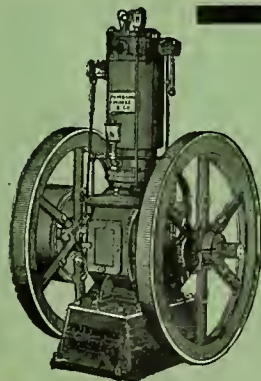
THE
IDEAL
WEIGHING
MACHINE
IN
MILL
OR
ELEVATOR

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The cheapest and most reliable power for elevator or mill. By using them one man can often run the whole elevator. Ask for catalog No. EV 544.

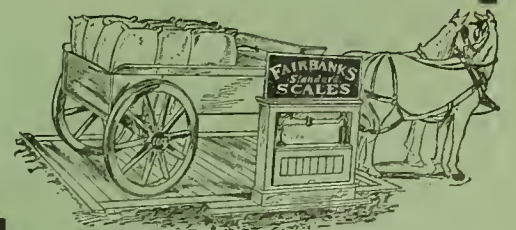
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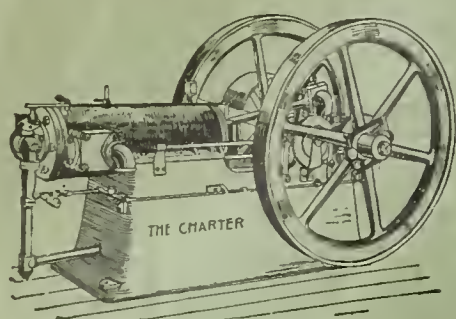
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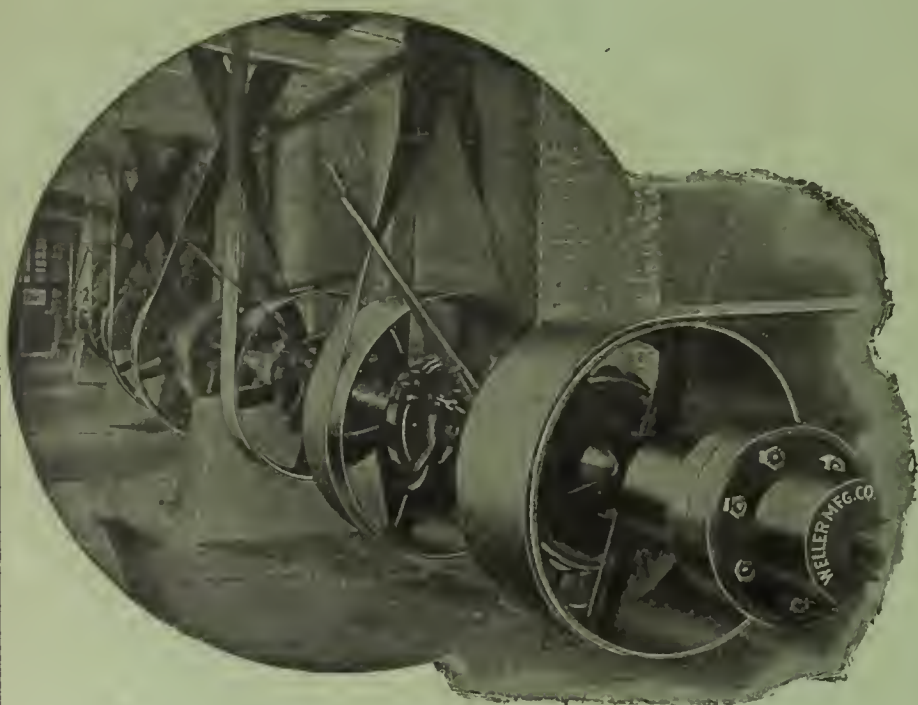
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Thousands of Them in Use Throughout the Country



A line of Weller Improved Friction Clutches installed in the Government mint at New Orleans.

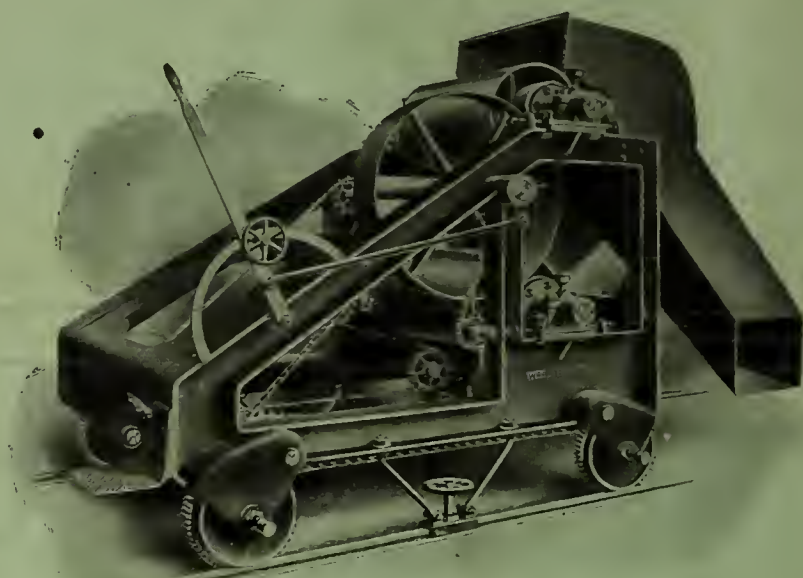
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For GRAIN ELEVATORS
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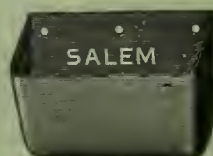
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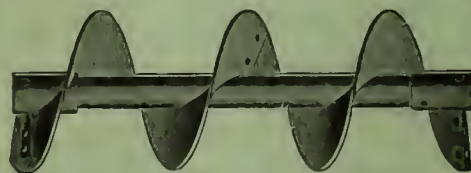


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Salem Buckets
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